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90.

we drifted slowly with the current to the westward. The canoe left us and we had given up all hope of being able to make the lagoon but about four o'clock in the afternoon a light air from the southward sprang up & we were able slowly to approach the passage. As we drew near the entrance a canoe was launched through the surf. It was soon along side & a native came on board and announced himself as the Pilot. He said to the captain "Bye & bye you pay me." on receiving an affirmative answer he at once began to shout orders in English to the man at the wheel. We slowly drew into the passage but could not get into the lagoon as the wind was very light & a strong tide setting out so we dropped anchor in the passage itself in six fathoms. Although not so clear as the water in these seas frequently is, I could see the bottom at a depth of nine fathoms by the lead line.

~~attach acct of discovery
of the
people of the island of Janna-
yellow~~

Thursday 20th March. At six A.M. weighed anchor & prepared to enter the lagoon. We had to cross to the eastern side as the natives had told us that there was no fresh water to be had at the island near the entrance. This we afterwards found to be false, but they wanted the ships near the principal settlement for their own convenience. The native passengers had been fishing with lines all night & had caught a few brightly coloured fish which they said were good to eat but which I did not like the look of. Six natives of Mukkefetan have stayed on board including the Pilot. One of them the English speaking native above referred to attached himself to me saying that he is my friend. He brought me two coconuts & a small basket of worthless shells. He warned me not to have dealings with any other of the natives as they will want to cheat me. I consider that he regards me as his special property while we stay here.

2. | At half past eleven we dropped anchor near the ^{principal} village on the east side about six miles from the entrance. The lagoon is fairly clear of dangers but a man has to be kept at the mast head to look out for patches of coral which rise in places almost to the surface.

1. | I landed with the captain & while the boats crew proceeded to collect & cut up firewood we went into the village.

The houses were roughly built, the wall posts rafters & ridge pole being made of the trunks of the Pandanus. They are thatched with the leaves of the same tree the eaves coming within about four feet of the ground & the ridge of the roof being about nine or ten feet in height. The sides of the houses are for the most part open but some of them have moveable screens made of coconut leaves to keep out the sun

The average size of the houses is about 20 ft by 10.

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or pain. The floors of the houses are composed of small pieces of hardened coral on which they place a few mats. In some of the houses was a heap of dried copra & outside nearly all of them copra was drying in the sun. In every house we visited they offered us green coconuts to drink.

The women were pleasing looking, rather above the average height most of them straight haired but some of them with wavy hair like the natives of Samoa. Very light copper in colour with good eyes & all of them with splendid teeth. Large families appeared to be the rule & all the children looked remarkably clean & healthy. The men nearly all wore shirts & trousers so that I suppose it is only when they go outside the reef in their canoes that they assume the native dress. Some of the children were naked others wore a small piece of cloth. The women wore thick fringes of coconut or pandanus leaf. We visited an old man whom we were told was the King but he seemed to have no respect paid him & his house was by no means so good as some of the others.

There were very few things worth buying. I gave a woman a dollar for a mat made of pandanus leaf with a dyed pattern upon it in red & black in squares & triangles also ^{bought} a fishing line & some wooden fishhooks & others made of old nails. and some artificial flies made of a piece of pearl shell with white feathers. I gave in exchange some English fish hooks & some needles & thread.

In nearly every house were to be seen one or two books & a slate. The books were the bible in Samoan & an English & Samoan dictionary. Most of the men could talk a little English &

none spoke quite fluently. one of them prefaced every remark by saying "Excuse me Sir." He brought me his Dictionary as he wanted the correct pronunciation of some words that he had marked. one was "guard". but after several attempts he could get no nearer to the right pronunciation than "Card". Then "Patience" the name of our ship presented some difficulty, and another about which he appeared particularly anxious was "destreperons". after going all through the village & seeing the church, & a long building like the other houses but with the sides closed in, we went to inspect the wells.

on these low coral islands the water is always very scarce & what exists is ^{not of good quality.} brackish. It is found by sinking in the coral to about sea level but the coral rock being porous allows the salt water to percolate & consequently the water of the wells is always slightly brackish. The well we were shown was about twelve feet deep and this was the approximate greatest elevation of the land as the well was situated about the centre of the island. The water in it rose & fell with the tide. Near the well the ground seemed damp and a small quantity of taro was planted. I walked across the island which is only about a quarter of a mile wide & came out upon the eastern side where the ~~waters~~ waves were breaking with a thundering roar upon the coral beach a contrast to the calm waters of the lagoon that I had just left. The length of the island is about ten miles. I was on the look out for insects but saw very few. I caught four or five species of dragon flies & there appeared to be the commonest insects upon the island.

I saw only two butterflies one of them a species of *Hypolimnax* ^{apparently of the same species as the one common in Fiji} and the other *Junonia Villida*. The larva of the latter I found feeding upon the leaves of *Scaevola Koenigii*. I saw one small moth, I think a Crambus. In the ~~of~~ rotten wood of a fallen coco-nut palm I found the skeleton of a small beetle and I found a small weevil upon the foliage of a low growing bush. I saw two or three spiders & a dipterous fly of the genus *Syrphus*.

X 94
Returning on board the ship I found that the native passengers had been busy all day fishing. They had caught a good quantity including a small shark about four feet long and had lost a larger one (why is it that it is always the largest fish that escapes)

Friday 21st Mch. Went on shore again at 6.30 A.M.

taking some of the passengers to help fill the water casks. The well contained very little water and what there was slowly ~~filtered up~~ ^{filtered in} through the sand & was boiled out in a coco-nut shell. By the time we had filled one cask, about fifty gallons, there remained only a little muddy sediment. I searched for insects but without much success. I took five specimens of a pretty moth *Sciopis Pulchella* an insect of almost world wide range and ~~from its habit of frequenting~~

X
It frequents the bushes of *Tournefortia Argentea*, upon the leaves of which, ~~at any rate in the Pacific~~, the larva feeds.

This shrub grows upon most sandy beaches throughout the Pacific & the moth is doubtless constantly carried out to sea by the wind thus accounting for its wide range. I found a few small land shells & saw two limpets of different species.

X
X
There were plenty of birds along the shore most of them plovers () I noticed also a stint () several terns a

X - Curlew (probably *Semipalm. sacra*) and a crane
 There appeared to be no proper land birds but at one of the houses they had a young pigeon which must certainly have been bred on the island. It appeared to be of the ~~same~~ species that the Fijians call *Puvu* () There were plenty of fowls & we saw one pig shut up in a sty. There were no dogs or cats and a black retriever that went ashore with us excited a great deal of attention especially from the children.

Y saw ~~There is~~ upon this island an albino native. They told me that his mother had had three other albino children but that they were all dead. The one I saw was a man of apparently five and twenty. His skin was of a reddish white colour with large brown freckles and he was altogether a most uncomfortable looking creature. It is singular that when the ships of the United States exploring expedition under Commodore Wilkes visited this island in 1841 they saw two albino natives. These may have belonged to the same family as the man I saw. Albinism is by no means common among the natives of the Pacific I can at the moment only recall one other instance that has come under my notice. This was a boy I saw in Fiji at a meeting of chiefs at near Basso in the year

X About 10 o'clock finding we could not get enough water where we were we returned to the ship and prepared to ~~move~~ return towards the passage as it appears that the best supply of water is upon the small island at the south side of the entrance. We ought to have anchored there in the first instance but the

matters for their own convenience induced us to go to the east side of the lagoon. The village where we have been is it appears only used as a temporary settlement while they are preparing copra the chief village being on the small island south of the passage.

When we got on board the ship we found a white man on board. He is a trader living on the island. His name is George Winchcombe and he says he has been at Nukufetau for twelve years. When he first came here there was another white trader living here but he has been gone some years. Winchcombe was put ashore here by the notorious thief & Pirate known as Bully Hayes. I gave him two of six button Scotts novels & some coloured pictures from an illustrated paper. He ~~says~~ ^{said} he ~~thinks~~ ^{thought} of leaving. But this they always pay. He said he saw a ship about once in five or six months. The last man of war that called was the Emerald in 1881.

X

At 10-30 we weighed anchor and stood across with a fair wind to an anchorage just inside the passage. We reached it in about an hour. The boat was at once sent ashore & returned in about an hour with a full load of water. As the tide was falling the boat could not make another trip for water but in the afternoon I landed to inspect the village. The ~~well~~ ^{water hole} here was large carefully kept and with a plentiful supply of water of fair quality. Dragon flies were flying round it in swarms & their larvae were to be seen in the water.

The small island on which the village is situated is properly Nukufetau but the whole reef is known to white men by that name. ~~The village~~ ^{It was now almost deserted but} consisted of about fifty houses built in the same style as those we had seen ^{the day before} ~~yesterday~~ but of a rather more substantial character. Besides there was besides a church, a school and a house for the Samoan Missionary teacher.

all three built of coral lime & thatched with leaves of the screw pine or Pandanus.

The teachers house was the largest being about sixty feet long with a verandah. The church & school were a little smaller. These three buildings occupy the centre of the village and the other houses are built round them in the form of a square. The appearance cannot be called pleasing as every tree has been cleared away so that there is not an atom of shade and the glare of the white coral is painful to the eyes. I visited the traders house, a

miserable affair no better than the houses of the natives. From him I learnt that the population of the whole reef is about 240 and that the adult men are to the women as three to one.

I had observed the scarcity of women. Large families are the rule, but boys are much more numerous than girls. The population had slightly increased of late years. The conversation with the native Pilot he told me that the two most powerful natives on the island have dubbed themselves policemen and impose fines for numerous offences ranging as high as six pounds but strange to say they appropriate the money themselves. I suggested to him that this

was not right and told him that they should be spent for the benefit of the community. He seemed to think so too but said it was the law, and the people seemed quite contented.

Upon returning on board about six in the evening I found a quarrel going on between some of the women. I told Ned (who is a chief among them) to use his authority to quieten them. He said he could quieten the men but not the women.

One woman took off all her clothes and prepared for battle, knives were flashing in several places and things began to look ugly. I managed to pacify her at length and ~~the row ended in~~ after a great amount of very loud talking, peace was restored. The natives brought us some fowls for which we paid a shilling each. About forty miles to the north east of the reef of Mukufetan is another island known as Vaitupu or Tracey Island. It is of flat coral formation like all the other islands in this group and consequently only visible a few miles at sea. When the natives of Mukufetan want to communicate with Vaitupu they go to the NE end of the reef ~~and~~ ^{on} a dark night & make a large fire. The glare is seen by the natives of Vaitupu ~~and they on the following night light~~ and is recognised by them as a signal that canoes are coming. On the following night they ^{Vaitupu natives} in their turn light a fire and continue it every night until the canoes arrive. ~~The fire is rendered necessary~~

In the evening it came on to blow strongly from the N.W and we put down a second anchor

Saturday March 22nd I went on shore about nine o'clock with four of the crew & some of the passengers to complete our stock of water. as it was not high water till after mid-day the water in the well was low and it took us till two o'clock to get the boat-loads on board of about two hundred gallons each. During the interval while the boat was going & returning I hunted for insects. Besides the species that I had already met with I took two small moths of a species of Noctua and a Tortrix. of other insects I noticed a small Blatta

X a forficula, ~~and~~ the empty pupa case of a Cicada. and a small gryllus. The fallen trunks of the coconut trees were infested with white ants and true ants of one or two species were common.

In conversation this morning with a native he told me that one man on the island had a family of 9 children. My informant himself had four all boys. Commodore Wilkes in 1841 estimated the population of Nukufetau at 1,000. so that it is

evident that a great decrease has occurred in late years.

(In 1886 2 yrs after my visit the population was stated to be 300. so that the trader's statement was not far wrong.)

On my return to the ship I was told that the woman who made the disturbance the previous evening, had, in consequence of having been struck by her husband, jumped overboard and swam towards the shore, but that a man had gone after her & brought her back.

The Tokelans have caught a large quantity of fish & have been busy all day cooking & eating it. Among other fish four small sharks. These have all disappeared & I issued no rice as they will not eat it so long as they have fish. Yesterday's rice is not yet consumed.

Insert here notice of Tattooing, origin & former belief of natives of Nukufetau.

During my walks ashore I saw nothing in the ~~composition~~ composition of the islands but coral & coral sand & in places a little mould from decayed vegetation. However on the beach near our anchorage I picked up some small nodules of pumice stone which floated in water & had evidently come from elsewhere.

Monday 23rd March A good breeze from the S. E. at daybreak so weighed anchor and proceeded on our voyage. This is the first fair

wind we have had since the day we left Suva. By mid-day we had done 30 miles. Many of the Tokelauans were coughing, I think from sleeping on deck while at Mukugetau. Administered cough mixture to those in need of it.

Monday 24th Mch. Wind still from S.E. Position at noon 6.0 S 177.50 E.

Tuesday 25th Mch. Heavy squall of wind & rain from the eastward during which the main sail was lowered. At noon our position was 135 miles south of Arorai the first island in the Gilbert group that we have to call at. Becalmed for two hours in the afternoon. After sunset a breeze from the N.E. which continued through the night.

Wednesday 26 Mch. In the morning with breeze a little more from the eastward. Position at noon 3.37 S. 176.43 E. making us 50 miles south of Arorai which we hope to sight to-morrow. Our observation for ~~last~~ longitude at 4 P.M. placed us 8 miles further to the westward than we were this morning at 9 o'clock and we have been steering NNE all day. This shows that there ~~is~~ is a strong westerly current.

At 6 P.M. the ship was put about to try and work to the eastward. We steered by the wind S.E. till midnight & then went about again & stood N.E.

Thursday 27 March. By at eleven went about again steering S.E. by E. At noon our position was 3.13 S. 176.26 E. or 17 minutes further west than we were yesterday. It is impossible now for us to make Arorai unless we get a westerly wind. This evening I have put the Tokelauans upon a short allowance. We have only a little over six 56th bags of rice left.

Friday 28 March a fine morning. Steering E.S.E.

at eleven put the ship about + stood to the northward for an hour but finding we could not lay our course we again went about + stood E. S. E. At noon our position was 4.10 S. 176.42 E.

Saturday March 29th. Wind still from N. E. Issued morning + evening half the usual rations. We have been passing all day through large shoals of bonitos. During a heavy squall this evening the mainmast split. It had consequently to be lowered + about two hours were required to repair it.

Sunday 30th March. The wind was a little more northerly this morning + we were able to lay an easterly course, thus getting well to windward of the Gilbert Group. At noon we were about 200 miles S. E. from Arorai.

Monday 31st March. At 2 A. M. this morning the wind changed to the eastward + we again went about on a northerly course. The Yokelaws caught a bonito of about ten pounds weight. This will be a help to them as they are not getting sufficient food. Position at noon 5.24 S. 178.10 E. being about 30 miles north of our position yesterday.

Tuesday 1st April. A change of wind soon after midnight ending in a squall of rain after which the wind died away altogether and at 9 o'clock we were still becalmed. At noon we were still 120 miles from Arorai having made a north course from our position of yesterday. I was talking this afternoon to Ned, one of the Yokelaw passengers, a native of Tapanuea and a man of some influence among the natives. He tells me that he first left his island some years ago + went to Fiji where he worked

six months for a white man in Savuka, after which he returned home. He was then recruited for Samoa where he worked four ^{for a German planter} years, and was then re-engaged by his employer as overseer and remained with him a further period of six years. At the expiration of this period of service he and the people with him wished to return home but instead of being taken back to their own homes in the Gilbert group they were landed on the island of Mallicolo in the New Hebrides. Here they would infallibly have been killed by the natives. ~~But~~ The ship that landed them proceeded to New Caledonia for repairs intending to return and recruit them again for Samoa. However shortly after they were landed a Fiji recruiting ship the "Jesse Kelly" called at Mallicolo and as they were tired of waiting and anxious to leave Mallicolo they engaged to come to Fiji. Upon their arrival there & the facts becoming known to the Agent General of Immigration he was unwilling to allow them to be indentured but eventually he engaged them for eighteen months instead of for the usual period of three years. It is at the expiration of this shorter term that they are now being returned to their homes. The landing of these Tokalaws in the New Hebrides was certainly a most reprehensible proceeding. Had the man referred to had two wives and a boy of 5 years old. They possess between them seven boxes of "trade" goods two snider rifles, a snider carbine and a revolver. He tells me that he has besides a considerable sum in money.

This afternoon having at length got a light breeze in our favour we hoisted a large square sail

but the halcyards being rotten like the rest of the tackle on board the yard fell upon the head of the mate cutting his head severely but fortunately not doing any serious damage.

Wednesday 2 April. This morning the throat halcyards of the mainmast carried away during a squall blowing down the mainmast. The wind is a steady breeze from the N.E. but we can lay no higher than N.N.W. by N. which is to the westward of our proper course. We are in almost the same position that we were in a week ago only a few miles farther to the eastward so that the past week has been no much lost time. If we again drift to the westward our case will become serious as the supplies are running very short. The monotony of the afternoon was varied by the capture of two sharks one about six feet long the other larger. These are the first we have seen since leaving Makufetan. They were of different species one a white shark () the other a blue shark () From each of them I took several specimens of the Remoras or sucking fish varying from four to eight inches in length. These fish adhere to the bodies of larger fish by means of a curious sucking apparatus at the back of the head. They also affix themselves to the bottoms of ships. I have seen specimens up to two feet in length. Of course this evening the Tokelans are fasting sumptuously. The afternoon was calm but in the evening a breeze set in from the N + we stood E.N.E.

Thursday 3rd April. It is four weeks today since we left Suva and we have not yet landed any

of our passengers, he only had provisions for the Tokelaws calculated to last twenty one days but with great economy I have still a fair quantity of rice left. This morning we are standing E. N. E. with a very light breeze. At noon we were 3 miles south & 15 miles west of our position of yesterday so that in spite of the breeze we have not been able to stem the current. I issued no rice this evening as there is still plenty of sharks. I am puffed the man I mentioned before with the swelling in his throat will not eat unless I feed him myself with a spoon. He is getting very thin.

Friday 4th April. A lonely morning but wind still N. N. E. which is of course unfavourable for us. At noon we were more to the eastward but further south than yesterday & consequently further from Arorai. It will be a fortnight on Sunday since we left Nukunetau & it begins to look as though we were fated not to see the Gilbert Group.

Saturday 5 April. We have been steering E. N. E. since last evening with a little better breeze but at noon we were again further south than our position of yesterday. & about 118 miles from Arorai. The "Patience" is certainly a wretched sailer. She will not lay within three points of the wind & being flat bottomed she makes about two points of leeway & then the current sets us continually south & westward. The variation of the compass in this position is about 9° east so that with all these three influences combined we find that since yesterday although steering an E. N. E. ~~course~~ by the compass we have really made an E. S. E. course. This afternoon the wind veered a little to the N. W & at 4 P.M.

we were laying N. N. E. A fish about two feet long has been following us since Wednesday keeping close to the madder the whole time. On Thursday morning he was hooked & nearly caught but the hook came away & since then he has refused to look at the bait.

Sunday 6th April. During the night we had a change of wind. We were whaled in by squalls during which the wind changed about in a very sudden manner. We were twice taken aboard. Probably there were waterspouts about but the night was very dark. We eventually settled down to blow steadily from the N. E. and we laid our course for Arorai N. W. by N. The Tokelaws continue cheerful in spite of the short rations. The two sharks were of course a great assistance. The two infants are a great trouble. They are both very weak and I have great difficulty in getting them to take any nourishment at all although I try to coax them with arrowroot rice & soaked biscuit.

Monday 7th April A fine morning with steady N. E. breeze & we were in hope of making Arorai in the afternoon steering as before N. W. by N. but our noon observation placed us 40 miles due south of the island & the course we had made was N. W. by W. in consequence of the current & leeway. This would carry us clear of the group altogether & things are beginning to look very black. We have now given up all hope of reaching Arorai and our intention is to stand on as we are going & try to make Yamawa a mere dot of an island sixty miles west of Arorai we had no tea for dinner today as it takes too much water. The swelling in Yamafufus throat

which I have been assiduously practicing ever since we left Fiji, but to day apparently very much to his relief. I was interested this afternoon in watching the Tokelau boys bore holes through the handles of their knives. In one instance the iron was quite an eighth of an inch thick besides the wooden handle. The apparatus used was ~~that~~ the apparatus known as the bow drill which is too well known to need description here, but it was the first time I had ever seen it used. It is in common use among all the Polynesian & some of the Melanesian races. The drill used on the present occasion was pointed with a piece of an old file.

There is some uncertainty about the actual position of Yamana as in the special chart of the Gilbert Group the island is placed twenty five miles further to the westward than in the large general chart of the Pacific.

Tuesday 8th April At daylight we were about twenty miles to the east of the position where we thought Yamana ought to be but did not sight it and as we were laying a good course for Onoaton a larger island further north the captain decided to try & make it. At noon we were about 20 miles N \equiv of Yamana when the wind changed and it was once more decided to make a last effort to reach Arorai. About 5 in the afternoon we sighted Yamana from the mast head bearing W about 15 miles. Our course at dark was S. E by E.

Wednesday 9th April At midnight last night we went about & stood N by E till six. At 7 a.m. as I feared, although we have been trying to beat

to the eastward all night Yamana was still in sight from the mast head. The current is evidently too much for us. We have now been trying for over a fortnight without success to reach Arorai and finding that we had only two more days supplies left I represented the case to the Arorai people. Dick & his wife said they were willing to land at Yamana, Akora said she was willing to land at Peau. Prokotani's husband Aidoka also desired to be landed at Yamana with his wife. Accordingly at 8:30 we bore away for the island and before nine o'clock it was visible from the deck. At 11:30 we cast anchor on the lee or western side of the island immediately opposite the village. The water is deep right up to the shore. At a distance of 100 yards we found no bottom at twenty fathoms and we dropped anchor only just clear of the breakers in five fathoms.

It is needless here to say how thankful every one on board felt to find any anchorage at all after the continued helpless drifting of the past fortnight.

No sooner was the anchor down than canoes were along side of us, the first that approached us being built in native fashion but in the shape of a whaleboat. It carried about a dozen natives who paddled along side & announced themselves as the police. Four or five of them came on board. Each man carried a whip made of three or four thongs of knotted sinnet fixed to a handle. After asking one or two questions of the Tokelaus they handed up a bunch of coconuts & returned to the shore. The other canoes now came along side. Our boat was launched & I went ashore with the captain, taking a crew of half a dozen to collect a supply of firewood.

Bokotau's friends took her and her husband ashore in
 a canoe & Dick & Donafie went in another. I was greatly
 surprised at the size & regularity of the village. The
 island is only about ~~three~~^{2½} miles long and under ½ mile in
 width but it possesses 540 inhabitants. The village
 is close to the sea on the western side. There is a central
 foot-path twenty feet wide bordered on each side with
 slabs of coral & strewn with fine sand. The length is
 about half a mile. On either side young breadfruit trees
 were planted but owing to the island being composed of
 nothing but coral they do not seem to thrive and I
 doubt if they will ever bear fruit. The breadfruit is
 not indigenous to the group. The houses are set back
 ten or twelve yards from the foot-path and are all
 built in line and at regular intervals. I counted
 twenty houses on one side of the path from the beginning
 of the village to the church & there were more beyond
 the church. I estimated the total number of houses at
 about a hundred. The church is built of coral lime
 and thickened with leaves of the Pandanus. It is about
 100 ft long & half as wide. The Samoan native teachers
 house faces the church. There was a German trader
 living here. He has been here some years but like
 the trader on Nukufetau says he is going to leave
 shortly. After inspecting the village I went into
 the bush to see what the island produced in the
 way of insects. Two small boys accompanied me &
 took great interest in the proceedings, pointing out
 what ever they thought would be of interest. The
 island, like all the rest of the Gilbert Group
 is covered with coconut palms & Pandanus
 under which ^{grow} dense ~~scrub~~^{bushes} of *Scorpa Koenigii*
 and along the shore and in the open spaces
 a few other low trees & shrubs. I saw

a great many dragon flies one a very large & handsome one different to any I had seen in the Ellice Group. of butterflies I noticed two species one was the common *Yponomea Villida* & the other the extremely handsome *Hypolimnes Parick*. one of my little companions brought me a sphinx moth alive but with every particle of scale rubbed off from its wings & body. It was attached by a slender thread tied to its tongue to the ^{child's} head ~~of my~~. I have seen children in Fiji treat the sphinx moths in a similar way. Mr. Butler has identified the specimen as *Charocampa arctoides*.

I ~~found~~ three or four different species of Noctuid and one specimen of *Scispea Pulchella*. An extremely pretty little moth of a bright emerald green colour was common upon the leaves of *Guettarda speciosa* and the larva was common rolled up in the leaves of the same shrub it was ~~was~~ ^{considered} ~~found~~ to be an undescribed species & Mr. Butler has named it *Margaronia woodfordii*. Many of the leaves of the trees were gnawed by a leaf-cutter bee of the genus *Megachile* & I found them constructing their cells in the crevices of the coral walls of the church.

~~I was only on the~~ when I returned to the village I found service going on at the church. It is held on Wednesdays & Sundays. As they came out I counted up to a hundred & then gave up as they were coming out by three doors. but I think that nearly the whole of the adult population attended the service. I then paid a visit to the Samoan Teacher Missionary teacher, unfortunately he could not speak English nor ~~German~~ Fijian & I did not understand Samoan. but he appeared a very intelligent man. His house was airy and extremely neat with large mats spread on the ground. He & the German trader returned on board the *Patience* with us. They were

both in want of some articles of medicine & the former wanted some kerosene for his lamp. The natives now brought us large numbers of coconuts as well as dried bonito and a quantity of fowls, he bought largely as we were anxious to replenish ~~of~~ our supplies to the fullest extent.

The natives here were much more reasonable in their demands than those at Nukuneman.

Their canoes were very neatly built and on very graceful lines. They were planked with small pieces of wood sewn together with sinnet & the seams made watertight by leaving leaves of the Pandanus inserted in the same way in which rushes are introduced between the staves of a cask. The small canoes had outriggers but the police boat & one other were built without.

Atora one of our passengers having found some friends here said she would go ashore here instead of at Peru so she left for the shore with her two boxes shortly before we sailed.

At six in the evening we weighed anchor and stood N.N.E with a steady breeze from E.

Thursday 10th April. A fine morning with a steady breeze from the eastward. At 9 o'clock we were between Onoatua & Peru, we are trying to reach Nukuneman. The Tokelans were busy eating coconuts & fish and a preparation made from the fruit of the Pandanus. It is made up into long rolls wrapped in leaves & resembles sawdust. They mix it into a stiff paste with water. It has an agreeable sweet taste. Position at noon 175.48 E 1.33 S. Peru in sight from the mast head bearing N. E about 15 miles. The position of Peru on the chart is, the captain says, about five

miles east of its correct position. We stood on N. E. till six P. M. & then went about and stood S. E. an eclipse of the moon to night.

Friday 11th April. During the night we have been steering S. E. but at 9 o'clock this morning Onoatua was in sight from the mast head bearing S. W. 15 miles, this shows that we have made no progress to the eastward during the night. At 10 A. M. again went about & lay N. As we were only drifting slowly to the westward I asked the Peru & Nukuanan people whether they would be willing to be landed at Onoatua or Tapetewea. They all expressed their unwillingness to be landed anywhere but on their own islands. Position at noon 1.41 S. 175.48 E. Went about again about 2 o'clock and at four Onoatua was again in sight bearing nearly S. so that we have drifted to the westward during the morning & could not now even make Onoatua if we wished to. At sunset again went about and stood N. one of the ^{native passengers} ~~Yakelans~~ was very ill this evening from having over eaten himself with coconuts & fish. Dosed him with Castor oil.

Saturday 12 April at midnight went about & stood S. E. once more. During the early morning hours we were able to work a little to the eastward and at 7 A. M. Onoatua was in sight from the mast head distant S. W. 14 miles. The wind which had been blowing for so many days from the eastward suddenly died out and we were all the morning drifting down with the current upon the east side of Onoatua. There was a long swell rolling up from the ^{eastward} ~~S. E.~~ and as each swell neared the land it curled over & broke in one long wave of white foam upon the coral beach. It was

a night the beauty of which I shall never forget but our position only a few hundred yards from the breakers was not an enviable one, we were quite helpless as there was not a breath of wind. Fortunately the current drifted us just clear of the north end of the island which we passed at a distance of about a quarter of a mile & all the afternoon we drifted slowly to the westward and at sunset we were about six miles distant from it.

Sunday 13 April. Calm all through the night and at daylight Onotou was just visible from the westward bearing N. E. Drifted all the morning and at noon our position was 1.57 S. 175.14 E. We are now out of sight of Onotou. The ^{young ones} ~~old ones~~ are still eating coconuts & fish but if the weather continues as it is I shall have again to put them on short allowance. The health of all is fairly good with the exception of the two babies. The younger has a troublesome cough but it is too young to dose being only a month old. The other only wants food and this I try to get into it at every opportunity. Towards sunset a breeze sprang up from the E & we headed north through the night.

Monday 14. April, Tapeteewa was in sight at daylight the south east end being distant about nine miles N.N.W. There is a very extensive & dangerous reef extending for an uncertain distance from the south end of the island ^{towards the south west} ~~and a little to~~ ^{part of which is known as} ~~the south west~~ ^{and extends of it} is the Mautikus shoal but the position of ~~which~~ is doubtful. Upon this shoal the "Corrain" whaler was wrecked on Jan 13. 1834. The only passage into the lagoon shown on the chart is one about the centre of the island but both had one of

matine / passengers

The ~~Lobclaus~~ & Jack one of the crew say there is a passage over the reef near the south end. As we only draw about six feet of water the capt ain decides to attempt it. By eight o'clock we are in the passage and found there was a depth of fourteen feet over the reef at high tide. It would not be advisable to attempt it except in very calm weather. This saved us going a long way round as the reefs ~~could be seen~~ extended to the southward as far as could be seen from the mast head. Inside the reef there are a good many patches but they are easily seen & avoided. The island of Tafeteeva or Drummonds island is a chain of ^{innumerable} small islands extending situated upon the same reef & extending in a N.W. & S.E. direction for a distance of thirty miles. Upon the north east or windward side deep water extends right up to the land but upon the S.W. side the reef for two thirds of ~~the~~ the length of the chain of islands encloses a lagoon in which we are now anchored. Towards the northern end the lagoon ceases and the reef fringes the land. At this end is the principal settlement of Letiroa and an anchorage outside the reef discovered & surveyed by the U.S. man of war "Peacock" one of Commodore Wilk's ships in 1841. Our business however was with the S.E. end of the island and we did not visit Letiroa.

As soon as ~~the anchor was down~~ ^{we got inside the reef} we were surrounded by sailing canoes but none ventured along side but a man jumped overboard from one of them & clambered on board. At 10.30 we cast anchor in three fathoms on a white sandy bottom about three miles from the shore as the lagoon was too full of coral patches for us to approach

X
Island
of Tafeteeva

closer. As soon as we could launch the boat I
 went ashore with the captain taking with us Ned
 with his two wives and one child six boxes of trade
 + his fire arms. Ned appears to be the chief of
 this end of the island. His village is situated upon
 the best island but one from the S.E. end. The
 whole village only contained six men but there were
 plenty of women & children. Ned told me that
 the men were all killed about two years ago by
 the ^{christian} people from the N.W. end of the reef, instigated
 as he says by the missionary teacher who is a Honolulu
 man sent here by an American society, but this
 part of the story I am loath to believe. Ned
 heard the news while he was in Samoa and
 expresses his intention of shooting the missionary at
 the first opportunity. He told me also that there
 was fighting here yesterday. I consequently expected
 to see some men with cuts or wounds about them
 but saw none so that I think ~~probably~~ the fighting
 is of a very desultory description & probably consists
 more of talking & boasting than real business.
 After landing Ned the boat returned & brought
 off Temuke & Aipoung his wife and nine
 boxes of trade. He belongs to an island a little
 further up the reef. During the absence of the boat
 I walked about the island. The men here wear
 no clothes but a small piece of cloth hangs down
 in front suspended from a piece of sinnet.
 The women wear a fringe made of the leaves
 of the screw pine. The houses are open at the
 sides & much like those I saw at Nukufetau.
 The canoes were built in the same manner
 as the Tamaoa canoes but were not such pretty
 models. He had been told that there was a

good supply of water but we only found one hole about big enough to fill one coconut at a time & utterly inadequate for watering the ships.

The natives brought us some toddy to drink

It was a new experience to me as it is not made among the natives of the purely Polynesian Islands

It tasted something like quizer beer. On the return of the boat with two large & two small casks we went to the next island about two miles off where we found one small well of fairly good water & in about half an hour filled the casks and returned on board about 8 P.M. The night being

very dark we ~~nearly~~ ^{nearly} missed the ship as she was showing no light and it was not till we ~~saw~~ ^{saw} the breakers on the lee reef that we knew we had passed her.

Upon getting on board we were told that there had been a disturbance between the ~~Yokelans~~ ^{passengers} and some natives from the shore. One of the latter wanted to claim the woman Pinto ga for the sake of her property, saying that she was his daughter (as she was). Yekapi her husband objected, naturally, to part with her & the woman herself was unwilling to go. The ship was crowded with natives & our ~~Yokelans~~ ^{passengers} all brought their guns on deck & loaded them & Yekapi threatened to shoot the girl's father.

Tuesday 15th April. The boat left for the shore at 5 A.M. in charge of the mate to get a supply of water. I remained on board.

As soon as it was daylight I made all the ~~Yokelans~~ ^{passengers} bring me their fire arms & having made them fire them off first I took them away & put them in the cabin. I then questioned Yekapi

He is a native of Nukunuan & his wife a native of this place. The girl said she wanted to go with her husband. They said they had given the girl's father a bolt of cloth & some tobacco so I hope the incident ~~has~~ terminated.

The ship was crowded all the morning with natives from the shore bring coconuts for sale & a few mats. I bought a very pretty neck ornament made out of the base of a species of cone shell ground down to a flat circular disk. They also brought some spears & swords made of the wood of the coco-ut palm & armed on each side with sharks teeth. and a spear tipped with the barbs of the sting-ray. These are intended to break off in the wound & are considered very deadly. The vegetation here was of precisely the same ^{character} kind as at Yamana. There were no land birds. I saw some stunts & cranes (*Geminigretta sacra*) Two Butterflies were common *Hypolimnas* *Prarick*, the larva feeding upon a species of *Abutilon* and *Yunonia* *Villida* the larva in swarms upon ~~Koenigia~~ *Scavola* *Koenigia*. An extremely pretty Hawk moth was common *Cephalonodes* *lyllas* flying about the flowers of *Guettarda* *speciosa* & I found the larvae on the same plant. I saw a few Noctua and two species of beetles one a coccinella & the other a longicorn Dragon flies were plentiful and I saw plenty of the leaf-cutting bees noticed at Yamana. I found the larva of a noctua *Heliothis* *armigera* feeding upon a spurge-like plant and took some on board with me but, alas, during the night they were devoured by the ants.

The natives of this end of Yafete were bold

little communication with those at the northern end. In fact the state of affairs appears to be similar to that existing in 1841 when the U.S. exploring expedition visited the place.

At the north end there were living two white traders & a Chinaman and the native missionary teacher from Honolulu. The natives of the south end have nothing to say to the missionary ~~and~~ they are not in a very prosperous state, make no copra, wear very few clothes & do not seem to have a particularly good time. However perhaps the return of me will infuse new life into the place. The ~~natives~~ ^{natives} we have on board for Peru & Mukeruan are very frightened of the Japanese men and came to us this morning & said they were afraid they would try & take the ships tonight. At the island where we got water last night there was in the centre of the village a large club house 70 feet long & 40 wide with a high pitched roof of thatch & eaves coming to within three feet of the ground. I afterwards found these large club houses a feature of the villages in most of the islands we visited.

The natives brought off to the ship for sale some beautifully plaited mats made of the leaves of the Pandanus. Various patterns were introduced into these mats by the use of leaf of different colours, ~~of the same~~

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This afternoon on a coral patch near the ship we saw three enormous rays or devil fish. () They were feeding upon the the bottom. We immediately got ready a harpoon and I went away in pursuit in the boat. Jack the ~~Hakalau~~ ^{Hakalau} stood in the bow with Gilbert 3d. sailor

the harpoon, four natives were at the oars and I took the steering oar. At the first attempt Jack struck one fairly through the back. The fish at once started off but as soon as the strain came upon the line the harpoon drew out as the head was rusty and the flukes did not open properly. He returned on board and filed and oiled the harpoon in the hope of seeing the fish again. In about half an hour two of them returned. He went after them again and for the second time Jack threw the harpoon striking a fish ~~as before~~ through the back. Away he went as before towing the boat behind him at a good pace and as he did not go in a direct line I had some difficulty in keeping the boat straight behind him. This time the harpoon had got a firm hold but after towing us for some distance the line ^{rotten like all the rest of our tackle} parted and away went the fish with the harpoon, a wooden staff about eight feet long and twenty fathoms of line. Once or twice we saw the staff appear above water and then we saw no more of either devil-fish or harpoon. I have since thought that perhaps it was quite as well that he got away as these fish are extremely powerful and he might have capsized the boat. They have enormous mouths furnished with large bony plates suited for crushing the coral ~~rocks~~ among which they feed. Later we saw some of even larger size than those we saw at Yapeama.

The ~~Yapese~~ ^{Yapese passengers} have bought a large number of fowls and the ship is crowded with them. This evening as I was sitting aft upon the top of the cabin I saw approaching me along the deck what I at first thought was some new

kind of bird. on closer inspection it proved to be an unfortunate fowl but plucked perfectly bare of feathers. of course I instantly wrung its neck at which the owners appeared very much astonished and offended. They explained to me that the feathers came off much more easily while the bird was alive. I said that it might be so but I would not permit it. There were now about thirty ~~the~~ passengers remaining on board and this evening they boiled at one operation in the coppers upwards of twenty fowls. Every fowl had a piece of coloured wool or other distinguishing mark tied to its legs so that the owner might know his own fowl but the operation of drawing was not considered necessary.

At 5. P.M. the boat again went ashore, ~~to~~ it being then high water, for another load of fresh water, returning about eight o'clock.

Wednesday 16. April. The boat went ashore again at daylight to complete our supply of water and returned about ten o'clock. From an early hour we were surrounded by canoes from the shore with coconuts fowls & mats for sale. I bought a mat, a small woven basket three ~~but~~ broad brimmed hats made of Pandanus leaf a few shells & a necklace made of human teeth.

The mats are capital to sleep upon as they are cool & soft and we bought a considerable number of the coarser kind for the ships use.

I had great difficulty in preventing the ^{native passengers} Tokelans from parting with their trade in exchange for mats fowls coconuts etc. In fact I saw that if we remained at Apete wea much longer they would get rid of all their hard earned wages, so at last I prohibited them from trading altogether. Soon afterwards

X
 see later

a woman came to me in tears saying that her relations on shore had brought her a present of coconuts and a roll of tick abooboo. I told her that if they were a present she could accept them. Ten minutes later while my back was turned I was told that she had given in exchange a knife & a bolt of cloth (about twenty times the value)

Every available corner of the hold is now full of coconuts which we have bought for the ships use besides what the ~~skelans~~^{matines} have bought themselves.

In spite of the slaughter of the innocents that took place last evening there are still upwards of fifty fowls on board mostly cocks. They stalk about the decks all day eating rice & coconuts and as evening comes on there is "such a getting up stairs" as they struggle up the rigging and push & squabble for the choicest roosting places. The noise in the morning when each one hails the dawn is simply deafening. About mid-day the boat went ashore again for firewood and as most of the canoes had left us I went in her with the captain. He went to the same village as the one I visited on Monday.

I saw one house of a somewhat different character to others I had seen. It was built on posts & raised about eight feet from the ground. A ladder through the floor gave access to it. The lower part was used as a store for coconuts and was barred round with stakes & palisade made of the mid ribs of the coconut leaf. The upper room was comfortable looking & very clean. There were six skulls in a row on the floor and I understood the owner to say that he had killed them himself one had a hole in the forehead and he took a knife & made a motion of striking at it, pointing

to himself & then at the skull. However about this I am in doubt and am inclined to think that they may have been the skulls of his ancestors since Commodore Wilkes says that they are preserved by these natives & held in great reverence.

X verify I had about two hours to spare and I devoted them to searching for insects. I caught a small moth that I had not previously met with. Two heteropteran insects and a small wasp. I also took three specimens of the handsome humming bird hawk moth *Cephonodes hyles*. It was flying round the fragrant white blossoms of *Guettarda speciosa*. I also saw several of the handsome butterfly *Hippodamia rarick*. I saw no land bird what was there were a few stints a plover and a small black & white bird with red legs a good deal like the Red Shank but smaller, probably

X
()
we returned to the ship with a load of firewood about 7 P.M. not having been able to leave before on account of the tide.

Thursday 14th April The usual crowd of canoes came off at daylight but this morning they have brought nothing for sale and are only apparently on the look out for anything they can get. I refused to allow any to come along side but the ^{native passengers} ~~Sotokans~~ were still anxious to make their presents as before. One canoe remained about twenty yards from the bows and a boy dived from it to the ship. A man was waiting ready at the bowsprit end with tobacco & reels of cotton. I only saw him as he was returning with his prize. Koravi wife of Kawia^{of Onoatloa} then came to me in tears and said that her brother was alongside in a canoe & that she wanted to give him a box of trade. I tried to dissuade her from doing so telling her that she had much better take her wages home with

her, but she persisted & I consented. No sooner was the box in the canoe than without a word of thanks or even of adieu they shoved off. When about fifty yards away curiosity to see what ~~the~~ ^{the box} contained prompted them to take a look at the contents. Having satisfied their curiosity they hoisted sail and returned to the shore.

Ned & his two wives & child came on board to say good bye. We had landed them in the garb of civilization. Ned in flannel shirt and trousers the women in decent cotton dresses and the child in a gorgeous suit of cotton pyjamas and an embroidered smoking cap. But to-day what a putting off was there. They had reverted to the airy ^{style of} native undress and probably felt much more comfortable in it.

Just before we left a canoe came along side in which was a fine little half caste boy son of an Englishman living at Lakemba in Fiji by a Yapeteuan woman. Lucy one of our passengers had known him when she was in Fiji and made a scene at parting.

At 9.30 we weighed anchor and stood out to sea through the passage with a light breeze from N.N.E. Headed east all day but drifted south ~~west~~ as the current was too strong for us. In the afternoon lost sight of Yapeteua the south end then bearing N.W. by N.

Friday 18th April. The same light breeze continued all through the night. We thought we might have seen Onoatua at daylight but nothing was in sight even from the mast head. Our position at noon was 2.28 S. 175.27 E. so that since leaving Yapeteua we have drifted with the current about

fifty miles to the southward, this observation
 places us about west of Tanagera. During the
 afternoon the ~~Tobolobous~~^{natives} caught several bonito.
 We passed through several shoals of them playing
 on the surface of the water. When a shoal
 was sighted ahead one of the ~~Tobolobous~~^{natives} went to
 the end of the bowsprit with a stiff pole about
 twelve feet long with a strong line fastened to
 it. at the end of the line was a fish shaped
 bait of pearl shell with a tortoise shell hook. The
 bait was trailed in the water and upon being
 taken by the bonito he was dexterously swung
 backwards by the fisherman so as to fall on
 deck. The fish caught varied in weight from
 six to ten pounds. They are rather coarse eating
 and the flesh is as red as beef and they possess
 an extraordinary quantity of blood. When they
 fall on deck they flutter most vividly in a
 similar manner to a mackerel and speedily
 batter themselves to death. I suspect that the
 pursuit of the bonito has been a fruitful cause
 of the colonization of many of the smaller island
 groups of the Pacific. The search of this fish
 the natives venture to sea for many miles in
 their canoes trailing the bait astern. Should
 a contrary wind arise suddenly they are
 in danger of losing themselves altogether especially
 among these low islands. They might then drift
 for days or perhaps weeks until they either died
 of thirst or happened upon some other island.
 Towards evening a light breeze sprang up
 which at length ~~for~~ after weeks of weary waiting
 had some westerly in it, and we steered during
 the night NE.

Saturday 19th April. Our breeze failed us again at daylight but sprang up again during the morning. At noon we were about eleven miles to the westward of Yamana. We have consequently made about twenty miles to the eastward & nine miles south since yesterday although we have been heading N.E. all the time. Since leaving Tapetanea the ~~Yakobans~~^{passengers} have done hardly anything all the time but stuff themselves with coconuts and fowls. and during the calms of the last two days our course might have been traced for miles by the track of feathers & coconut husks that have floated astern. The health of all is ^{now} fairly good. Tapetanea the man who has the swelling in his throat is ~~now~~ convalescent but the two infants continue to cause me anxiety.

~~At 2 P.M.~~ During the afternoon the breeze continued to freshen. At dusk we passed about half a mile from the south end of Yamana and then steered N.N.E. with a breeze that continued all through the night.

Sunday 20th April. We have been running well on our course all through the night and this morning. At noon we were ten miles from the south end of Nukunau as shown in the special chart of the Gilbert Groups, having run 45 miles since 6 o'clock last evening. We found that the position of Nukunau should be ten miles further to the westward than it is shown in the chart. It was in sight from the topmast head at noon. Kept on our course till 10 P.M. & then went about & stood W.S.W.

Monday 21st April. At daybreak the S.E. end of Nukunau bore W distant six miles. The wind was from the N.W. consequently we had to beat up

Towards W. A ~~heavy~~ ^{long} rolling swell from the northward caused a heavy break all along the north east side of the island. About mid-day three canoes came off to us and remained about an hour & then returned. All the afternoon we were beating to the N.W along the eastern side of the island in order to round the northern end of it & anchor on the western side. Where alone is there any anchorage.

Koravi one of the Tokelau women had a violent hysterical or maniacal fit this evening and was very violent. He threatened to jump overboard & was restrained with difficulty. Eventually she became quieter but appeared to recognize no body.

Tuesday 22nd April. The N.W. end of Nukunau was 6 miles south at daylight. At eight o'clock we rounded the end of the island.

The woman Koravi was very troublesome all night. The others said she had a devil & wanted to drive it away by firing a gun off across her throat, but this I sternly refused to allow.

At about ten o'clock we cast anchor opposite the village where the ~~missionary~~ ^{teacher's} house was.

As we passed the north end of the island we had sent ashore a man & his wife & one infant in the boat. At the missionary's village we landed ten more the boat making two trips.

We were anchored only about fifty fathoms from the shore reef in ~~twenty~~ ^{ten} fathoms of water. The landing was very bad as it was through the surf and only practicable at high tide. I went ashore in the boat on her second trip. The village presents ~~little~~ few objects of interest. There was

a church & teachers house but built of leaves instead of lime and a large village club house similar to those we had seen at Tapatuea.

The missionary teacher was a native of Nukufetau in the Ellice Group. He told me that the whole island contained between eighteen & nineteen hundred inhabitants. The women were to the men as three to two. Parts of the ~~low~~ village & adjacent bush were divided off by walls built of slabs of coral, ~~the coconut trees~~ denoting as I was told the property of different owners.

The teachers influence here did not appear to be so absolute as at Tavana but then this is a larger island and has probably not been so long under missionary influence. The teacher had a fair quantity of copra which the captain agreed to buy for trade.

The flora & fauna were of precisely the same character I had noticed at Tavana & Tapatuea.

About one o'clock we returned again on board.

In the afternoon I went in the boat with the captain to the south end of the island to see the white trader, an American by name Harry Meader, formerly resident in Fiji. A typical member of the beachcombing fraternity. He had a fair amount of copra which the captain agreed to purchase.

He told us that about last Christmas time a large schooner the "Julia" belonging to the Sandwich Islands had been wrecked on the south end of the island. He had been at the island of Sandwich in the New Hebrides recruiting labourers for Honolulu, and ~~he~~ had left Onoatoa one night shaping, her captain said, a course to take her twenty five miles to

the north of this island but had run onto its northern end, so that in a distance of about forty miles the current had taken her thirty five miles out of her course. On board her as a passenger was a certain Captain Phillips who had run away from Fiji a few months previously with a schooner named the "Sancy Lass". Hearing that a man of war was after him he left the schooner in the New Hebrides & took to the bush. The schooner was found at the island of Sandwich⁺ in the New Hebrides & ordered to proceed to New Caledonia whence she was sent back to Fiji. The "Julia" picked Phillips up at Sandwich. He exhibited some spear wounds in his back which he said he received in Fiji but were more likely to have been received in the New Hebrides. The trader told us that as soon as the Julia ~~struck~~ saw that the Julia was firmly ashore, the natives boarded her & stripped her of everything so that the crew were not even able to save their chests. About three weeks before our arrival the crew had been taken away by another schooner belonging to the Sandwich Ids. They have however left behind them a half caste Fijian & a Motumak native who we are going to take back with us. The Julia soon went to pieces & we saw nothing of her but some ~~deck~~ planks & the deck house, ~~which~~ ^{the latter} the trader had utilized as a ~~store~~ dwelling.

He returned on board at six o'clock. Soon after dark we were surrounded by a large number of canoes fishing for flying fish. The glare from the torches lit up the scene in a weirdly picturesque manner. Three natives go in each canoe one paddles, one holds a large torch of dry co-co-nut leaves and the third has a

* This island of Sandwich or Vate in the New Hebrides must not be confounded with the Sandwich Islands.

landing net at the end of a pole about eight feet long. The flying fish are charged by the light of the torches and as they fly towards the light the man with the net scoops them up. I saw one man catch five fish in the space of about a minute. As the canoes advance in line the effect of the glaring torches shadows ^{upon the water} cast by the glaring torches upon the canoes & their dusky occupants is a sight not to be forgotten.

Wednesday 23rd April About one o'clock this morning a smart squall suddenly set in from the westward we were caught in ~~a most dangerous position~~ ^{on a lee shore & without protection} as we were anchored close to the reef without a possibility of getting away from it. We quickly let go a second anchor and the first force of the wind soon moderated but a nasty sea got up which tailed us in closer & closer to the reef every minute. The early morning hours passed as we anxiously waited for the dawn. The phosphorescent gleam of the breaking swells appearing to grow nearer & nearer to our stern as they raced in one after another towards the reef. ~~At~~ ^{about} ~~five~~ ^{five} o'clock the ~~sea~~ ^{sea} rollers were curling over so close to our stern that we expected every moment to strike but after daylight the force of the sea gradually moderated. We were still in a most dangerous position with no possibility of getting out of it without a change of wind. ~~Soon~~ ^{After} a few canoes came off this morning but brought very little worth buying. I bought a hat plaited from Pandanus leaves and some swords armed with sharks teeth. Soon after daylight the trader came off, having come up from the south

end of the island before daylight. during the night. He and the missionary teacher are not on good terms as was to be expected but making full allowance for exaggeration the teachers seem to carry things here & elsewhere with a very high hand.

I heard of a white trader being fined 10,000 coco-nuts for killing a fowl for dinner on Sunday. This was said to have happened in the Ellice Group.

~~It would be futile for a trader to object to pay such a fine supposing it were imposed, as he would be in no danger of "taboo" & would consequently do no business at all!~~

The trader here says that although the teacher has been on this island nine years not one of the natives can read yet.

I visited the school both in the morning and afternoon and am bound to say that I saw no sign of teaching on either occasion.

Its chief use so far as I could judge was as a repository for the hats the women wear when they attend church. ^{suppose} As a sort of outward visible sign of the ^{image of spiritual grace.}

This wearing of hats in church by the women is to my mind a most ludicrous practice but perhaps a harmless one. It has been introduced I believe from Samoa and is ~~now~~ in vogue at all the islands that I visited that are under the influence of the London Missionary Society.

When I say that these badges of Christianity do not exceed in size ~~than~~ the hat worn by a ~~female~~ monkey on an organ the absurdity of the whole thing will be apparent. They are gaudily trimmed with ribbons and artificial flowers and are absolutely "de rigueur" for church attendance.

In the afternoon the boat went ashore and brought

x note re Mrs. G.

off nine bags of copra belonging to the trader.
 This being the commencement of our loading. We
 expected to have got some from the Missionary teacher
 but he refused to-day to sell it except for money
 although he had agreed on our arrival to take
 trade for it. He denies that he made the
 arrangement but I was present and heard it.
 I hunted all the afternoon for insects but got
 nothing different to what I had got before
 except a reddish coloured Ichneumon.
 The canoes were out again to-night catching flying
 fish. Fortunately this evening the wind changed
 back to the eastward.

Thursday 24 April. Still at anchor off the traders village
 crowds of natives were on board all the morning but the
 boat was unable to go ashore until the afternoon. I worked
 with great interest some natives ^{on board} ~~with great interest~~ playing the game of
 cat's cradle. It is common throughout the Pacific both
 on Polynesian & Melanesian Islands and is doubtless ^{a game} of
 great antiquity, but in the Pacific it is played with
 such skill & variety as ought to put a European child to
 the blush. The combinations appear endless & the game may be apparently ^{prolonged} ~~prolonged~~
 indefinitely. At one the boat went ashore & returned in an hour with
~~the~~ ^{some} copra belonging to the trader that the captain had
 purchased yesterday. We then immediately weighed anchor
 & proceeded to the south end of the island opposite to
 the traders house to get more copra. By the evening
 we had brought off 29 bags. The landing here is
 a little better than at the north end of the island
 but still dangerous. The half-caste Fijian ^{belonging to the Julia} who was
 to have gone away with us has at the last moment
 decided to remain. The charms of a native lady
 having been too much for him.

Friday 25th April. We had intended to have sailed

for Peru at daylight, but about five o'clock the Fijian half caste came off to us asking us to go ashore as the natives were going to murder the trader. He returned to shore at once in a canoe & the captain & I with three of the crew followed immediately in the boat. After narrowly escaping a capsize in the surf we found a very excited crowd of natives assembled surrounding the trader & the half caste. He made out the cause of complaint to be that the natives thought that the trader had told the captain not to buy any copra except through him. They said that our man Jack the ~~Shelton~~^{Gilbert Islander} had told them so yesterday and that they had talked the matter over all night in the club house and had resolved to burn the trader's house & kill him as soon as we were gone.

~~This statement of the~~ They were also incensed for some reason or other against the Fijian half-caste and he now said he was afraid to stop and would go with us. The misunderstanding arose in this way. The captain said he would buy copra but not ripe nuts, the latter being the form in which the traders buy it, as on board ships there are no facilities for cutting it out & drying it. The "fons et origo mali" was Jack the ~~Shelton~~^{Gilbert Islander} who had told them the captain would not buy "tebin" which he at first said meant copra in his island Tabetewa. "Tebin" here means ripe dry nuts and "tacka tack" means copra and the captain who has traded through the group for years says he never heard it called anything else.

Jack was asked to explain and after wilfully misinterpreting two or three times was obliged to acknowledge himself a liar. Having brought matters

to a satisfactory issue we returned on board about ten o'clock and the natives during the day brought off about a ton of copra in quantities varying from five to about sixty pounds, also a few dried sharks fins. They took principally tobaccos & fishing lines in exchange & a few fathoms of cloth. The trader told me that some years ago a tidal or more properly a hurricane wave swept completely over some part of this island and left one village without a house, and that nearly everyone belonging to it was drowned.

The club or talking houses that I have mentioned are a regular feature in every village in this group. There are six on Mukuama. They are large thatched roofs 70 to 80 ft long & 40 to 50 ft wide & 30 to 40 ft to the ridge pole open under the eaves which come to within three feet of the ground so that it is necessary to stoop when entering them.

The old men live in them altogether each having his own place in the house, a space of about ten feet square to which he confines himself & on which he spreads his mat & keeps the box that contains his personal property. The married men live in their own houses but all assemble in the club house to talk. All talk at once & the noise is deafening.

Saturday 26 April. This morning we heard a shot ashore and when the canoes came off they told us that a man had shot and killed another for ~~seducing~~ his wife, committing adultery with his wife. The occurrence happened at the missionary teachers village. About nine o'clock we weighed anchor and proceeded to the teachers village and the natives brought off copra in small quantities all through the day. The mate went ashore and on his return said that the

X See ~~note~~ reference to this wave in historical chapter.

man who was shot was not dead but evidently
 dying. The bullet had gone through the stomach and out
 at the back. I did not go ashore as I felt that I
 could not have done anything for him. At six P.M.
 we sailed for Peru with a fair wind. Course W.S.W.
 Sunday 27th April. At 2 this morning we saw a
 light on the starboard hand and immediately went
 about ship. At daylight we found ourselves to the
 westward of Peru about two miles from the S.E. end.
 We must have had a very narrow escape of running
 on the reef during the night and should probably have
 done so if we had not seen the light. ~~which was~~
 Probably ^{it was} some natives fishing. The reef extends a
 long way from the S.E. end of the island. The current
 must have carried us along faster than we anticipated
 as we did not expect to be near Peru till daylight.
 At 6 A.M. we cast anchor opposite a house belonging
 to a white trader near the S.E. end a quarter of a
 mile from the shore and landed a native of Mukuman
 who had asked for a passage to Peru. After breakfast
 we weighed and proceeded along the western shore of the
 island and anchored off the point of the reef near the
 centre of the island at a place since named Espicyle
 Anchorage. There was a boat passage over the reef
 not available at low water. We were anchored about
 two miles from the shore and a hundred yards outside
 the reef in fourteen fathoms of water. Two canoes came
 off from the shore but as it was low water at
 twelve & we had anchored at eleven we could not send
 our passengers ashore until the tide rose. At one
 o'clock one of the natives Pawa by name asked to
 be allowed to go ashore in one of the canoes that was
 along side leaving his wife on board to bring his
 boxes in the boat. I wanted him to take his

boxes with him in the canoe but the natives would not touch them saying that if they did so the teachers would fine them twenty bags of copra for working on Sunday.

As soon as the tide rose sufficiently the boat went ashore taking six of our remaining Tokelau passengers and their boxes.

While the boat was away with the mate and three of the crew landing the Tokelaus a sudden squall came on from the northward & we dragged our anchor & drifted off to sea with all the chain hanging over the bows. We got sail upon the ship as quickly as we could but it was a long time before we could get the anchor up. We fortunately got back to the anchorage just before dark and anchored in 8 fathoms with fourteen fathoms under the stern.

Monday 25th April At 5 this morning all the rest of the Penn passengers went ashore in the boat except two who went in canoes. After breakfast I went ashore with the mate to the house of a white trader named Prout who lived at this end of the island, the other trader from the south end Frank having also arrived in a beautifully built canoe made by himself. Prout had five tons of copra which the boat was to bring off.

Our presence caused great excitement among the natives. They crowded the doors & windows of the traders house and every chink was occupied by an eye. In all my subsequent experience I never met with such eager curiosity. It was a very hot day & the crowding did not add to the comfort. Penn appeared to be in every way like the other islands of the Gilbert Group and I noticed no new

My hunt for insects revealed nothing new but from among the debris of the trader's copper store I found six species of beetles one of them apparently a luminous elater. The trader confirmed my view by telling me that there was a firefly on the island.

The trader also told me that there was one species of land bird about the size of a pigeon but not so stout with wings more hawk-like of a dark brown or black colour & that it built in the co-co-ut & Pandanus trees. This I have not the least doubt was the Noddy tern *Anous stolidus*, erroneously described by the trader as a land bird. I subsequently found it breeding plentifully upon Kuria.

The trader Frank told me in conversation that according to his observation the whole island was rising bodily & noticeably. He had lived here four years and when he first came he said he could come out of the reef passage with a loaded boat at all times of the tide. It is now dry at low water. He named & showed me other indications in confirmation of his idea and he estimates the amount of elevation at about two feet during his residence here. There tended to show that some ^{actual elevation & not} ~~other influence~~ besides a mere silting up of the boat passage had taken place. As a careful survey of the anchorage was made in 1884 a few weeks after my visit by the officers of H. M. S. Dart an opportunity is ^{now} afforded for ascertaining whether the supposed elevation is still occurring.

In 1881 a ship called the "Orwell" was wrecked on the south end of the island on the reef that we narrowly missed on Sunday night. The natives stripped & plundered the ship of everything. Last year H. M. S. Espiegle called here and after

investigating the facts fined the island three hundred bags of copra giving them three years to pay the fine in. The fine was paid in a month and the natives say they would like another wreck at the same price.

The missionary teachers here are just as autocratic as at Nukunau. They have fixed the price at which a native shall be paid by the traders for a days work at a dollar a day. Should a native disregard this order & work for less he is fined ten bags of copra. The trader on Nukunau told me that recently a ship called there on a Sunday and made a signal for some one to go off. The trader went off in his boat alone and found that the mate was ill & the captain wanted some food to make broth for him. He returned on shore and took him some. For this violation of the Sabbath he was fined 900 sticks of tobacco and paid the fine. On Peru there are three missionary teachers and each one has a church. They are built of coral lime. One of them had been recently rebuilt. It had formerly been built of weather boarding the timber having been bought by contributions from the natives and brought from Auckland. Suddenly the teacher changed his mind. He would have a coral lime church so the wooden church was pulled down and a coral one built. The timber of the old church was appropriated by the teacher who used it to build canoes which he let out to the natives at the rate of a dollar a day. This teacher is a native of Tonga. He is said to have committed a murder there and to have been sent adrift in a canoe or escaped in one of his own accord. By some ^{lucky} chance he managed to land in the Ellice Group where he lived for two years with one of the Samoan teachers there. He was then

sent to Samoa where he completed his education as a missionary teacher and was sent in that capacity to this island.

The pay of a missionary teacher in these islands is 100 dollars a year and 50 dollars for his wife. They have besides the privilege of selling bibles & slates to the natives. For the former they charge a dollar and for the latter a shilling. They ~~live~~ live free, all the best fish is given to the teacher and they demand and get as many coconuts as they require both for eating and for selling as copra. The teacher at Nukufetua had three houses full of copra it.

Besides this they claim half of all the fines, these they share with the so called policemen, and they inflict them themselves.

~~It seems a pity that the London Missionary Society do not keep a permanent white resident in the Gilbert Groups to exercise some sort of a check upon the excess of religious zeal shown by the native teachers.~~

~~At this island, I was told, a vessel called trading a year or two ago. The teacher went on board & saw a bell which he desired to buy for the church. A price in copra was named and the bell was allowed to go ashore in charge of one of the white traders. The copra was to be brought to the trader as it was made and the ship would return for it. Shortly before the ship sailed the teacher went on board with a small quantity of copra to buy some small article of trade. The amount he had brought was not enough to pay for the article he wanted so he eventually took something else. As he went over the side he remarked~~

"I cry for this ship" after the ship had left he went to the trader & demanded the bell and was allowed to have it upon promising to send the copra. No copra came and the trader after a time enquired of the people the reason. They told him that the teacher had forbidden them to make any.

In six weeks time the ship returned. The Bell was in use but there was no copra forthcoming and the natives had been forbidden by the teacher to trade or hold any communication with the ship.

Upon being asked for an explanation the teacher said that in consequence of not having been allowed to have the thing he wanted upon his visit to the ship he had forbidden the people to work for the bell. The bell was accordingly removed.

The trader Frank informed me that when he first came to Mukuman before the arrival of the Christian teachers that crimes of murder & theft were punished with death. Now however they are not punished at all & are consequently more rife. He instanced a ^{recent} case of a man shooting his own brother for no apparent reason, and another where a man threw a pointed stick used for husking coconuts at his wife transfixing her through the temples. In neither case was any punishment inflicted upon the murderers either by teachers or policemen.

The instance that occurred at Mukuman during our stay bears out the trader's statement. Although in that case there had been great provocation and the man was possibly justly punished. The mate told me that when he went ashore the murderer was sitting with the other men in the club house engaged in an argument as to whether they would sell us copra or not.
Probably such a
Possibly

state of affairs was unavoidable but it is hardly what a visitor would expect to meet with upon islands nominally christianized. Now that the islands (1892) have been placed under the Protectorate of Great Britain I trust that a new order of things may be initiated. The trader Frank had fitted up his boat with harpoon & lances for catching the gigantic rays or devil-fish that frequent the reefs. He told me that one he killed measured 29ft 7 in across the wings and that when he towed it ashore ten men could not lift it, so he was forced to cut it up in the water. It proved to be a female and he took out of it a young one that was 2ft across. He says that if the one we struck at Apetemea had got into deep water it would probably have swamped the boat unless the line had broken. The point most vulnerable is, he says, just between ^{in front of} the eyes.

X Confere size in not that large

Tuesday 29th April. At daybreak as I was sleeping on deck I was awakened by a noise in the water like a horse snorting. I looked over and saw a small whale just astern of us. He rose two or three times to blow & then disappeared. The boat went ashore at daylight for the remainder of the copra returning at 8.30. During the morning I remained on board. The natives & all hands on board were busy fishing with hand lines. The ~~water~~ ^{sea} was simply alive with fish and as the ~~sea~~ ^{water} was exceptionally clear we could see them playing about in shoals or leaping from the water while down below among the coral

we could see the rock fish of every imaginable colour darting hither & thither in pursuit of the smaller fish. Quantities were caught most of them being gar-fish and a fish resembling a mackerel but rather stouter. The natives also caught some large red fish that live among the coral. For these they threw out a large hook baited with a mackerel. A similar fish is caught in Fiji and is there highly poisonous. Two natives died in Fiji recently (1883) through eating it. One of our Youyan crew recognised it as a poisonous fish as well as myself, but the ^{native} ~~Yokel~~ ~~passenger~~ said that here they ate it with impunity.

In the afternoon we saw a large black fish above the water near the ship darting about in pursuit of the shoals of mackerel.

At times the fish disappeared below the surface but at others nearly the whole of the fish was above the water & it turned & doubled in pursuit of the mackerel in a manner that surprised me when I took into consideration the size of the fish.

Presently it disappeared ~~altogether~~ and we thought it had left us ~~altogether~~.

One of the ^{natives} ~~Yokel~~ had a line over the stern baited with a whole mackerel. The bait was resting on the bottom among the coral. Suddenly there came a tremendous tug at the line and it ran out through the man's fingers to its full extent before he could put any check upon it. When the fish felt the strain of the line he leaped two or three times clear out of the water and we saw for the first time that it was a sword-fish.

I expected every moment that the line would part so I quickly ran below and got my gun and as the fish again leaped from the water at a distance of about ~~five~~ twenty yards I gave him ~~the~~ a charge of shot in the head. Laying his back fin down flat he rushed ~~out~~ as ~~terrific~~ straight at the side of the ship striking us about a foot or eighteen inches under water immediately underneath where I was standing. The force of the blow resounded through the ship and the fish was completely stunned the sword being broken off near the head. The hook had become dis-engaged and we were afraid that after all we should lose the fish as although stunned he was slowly sinking out of sight, the gleam of his silver belly showing distinctly now and again as he turned over & over in the clear blue water. One of the crew & a ^{native} ~~Yokelan~~ quickly made a light in the end of the line and diving overboard passed it over the fish's tail and we there carefully drew him to the surface. By the aid of the boat we brought the fish on board. The short stumps of the sword still remaining ~~on the fish~~ was shivered & split in two completely to the root. The fish measured five feet eight inches in length from the eye to the fork of the tail. The most curious part of the fish was perhaps the ^{large rectangular} dorsal fin. It was about three feet in length and when erect stood up about two feet. When not in use it folds up like a fan and is packed neatly away in a deep groove along

the back the sides of which close over the
 fin completely hiding it from view. There
 are also two long pectoral fins that ^{fold away} ~~fit~~
 together in a similar way into a groove along
 the fish's belly. By the aid of these fins
 which present a large area of resistance
 to the water the fish is enabled to make
 the rapid turns & doubles requisite ~~to enable~~
~~when in pursuit~~ ~~to catch~~ of its prey. For a straight forward
 rush they would evidently be unsuit-able
 as they would ~~impose~~ offer too much
 resistance so they are folded away in the
 manner I describe & which I noticed when the
 fish came at us. The colour of the fish
 when alive is black above silvery on the
 sides & white beneath. The fin is black but
 tinged all over with a beautiful shade of
 cobalt blue which adding to its remarkable
 appearance when seen above the water.

As soon as ~~the fish was~~ I had examined
 the fish and cut out the dorsal & pectoral
 fins for preservation I went over board
 & examined the hole. I easily found it
 although as it was under water I could
 not see it but I found the jagged edges
 of the copper & picked two or three splinters
 of bone out of the hole. Whether the sword
 went completely through the ship's side or not
 I do not know as the hole was already
 too full of copra to permit of an examination
 being made from inside. I intended to make
 an investigation on our return to F'iji after
 the cargo was dis-charged but I never had
 the opportunity. However in the Natural History Museum

~~I~~ ~~he~~ ~~heard~~ this at South Kensington may be seen a portion of a ships side pierced completely through by the sword of a fish of this species. He heard this evening from the natives that the King of Apamausa (an island to which we are bound) has been making war upon Nououti and that 37 natives have been killed.

Wednesday 30th April. Heighed anchor at 8 A.M. and steered for the island of Onoatua. It was a beautiful morning with a light breeze from N.E. and strange to say there appeared to be no current whatever. In two hours Peru was out of sight from the deck and at 2 o'clock we sighted Onoatua. As we approached the north end of the island we saw a very heavy break on the reef which extends to seaward about two miles in a N.W.W. direction and not as represented on the chart. The sea was perfectly calm and as we coasted along about half a mile from the reef suddenly a long ridge of water would appear to rise from nowhere & passing underneath us would race in gathering height as it went and generally followed by two or three more. The big ones came as a rule in threes & fours.

I certainly never remember to have seen such large breakers, as the swells rolled under us they shook all the wind out of our sails.

I could not help asking myself if the reef is like this in calm weather what must it be when a heavy easterly swell has been rolling in for days.

Throuding the ~~north~~ end of the reef we came to a comfortable anchorage in five fathoms close to a little island at the north end.

Upon this little island separated from the larger one where the natives lived, a white trader named ~~John~~ Fredfern had his store. We have only two passengers to land here and they are the last we have on board. I am heartily glad to have got rid of the responsibility as at one time when food & water were running short I had daily to try how little I could with safety give them. I must say that they all put up with their short allowance in a most cheerful manner apparently fully understanding that I was doing my best for them. I felt most concerned for the two poor little babies but they both seemed to improve after the mothers got their proper food & I landed them both safely at Nukunau.

From the time of landing the last ~~Yokelan~~ ^{native} at Onoona my authority ceases and for the remainder of the voyage I am ^{only} a passenger. As soon as we were anchored the trader came off to us bringing some books which to be exchanged for new ones. It is the custom among the traders in this part of the Pacific to pass their books on from one to another by means of vessels calling at the islands. Some books that we have had on board appear to have been at every island in the Ellice & Gilbert Groups. A trader's life ^{or rather existence} on these little small islands must indeed be a monotonous one he is perforce confined to the reef on which he elects to settle as the calms and currents added to the great distances that the islands are from one another render it unsafe ~~for the traders~~ to attempt to pass from one island to another in small boats. How gladly then must they welcome the sight of a ship

an event that happens to them perhaps three or four times during the year.

On the present occasion Redfern told us that he had seen us when we passed Onoatua on the 10th April and the next day the "Calumna" a schooner from Honolulu anchored there. He professes to have been the ship that took away the shipwrecked crew of the "Julia" from Nukunuan. We must have been close to her on April 10th but we did not sight her. I remained on shore ^{with the captain} talking with Redfern till nine o'clock and we were lighted back to the ship by the torches of the natives fishing for flying fish in the manner described above.

Thursday 1st May At daylight this morning we kedged the ship in nearer to the shore. About noon I went ashore and as it was low water I walked all over the reef looking for shells. I met with very few and all of them of a common kind but the natives supplied me with some better ones and from them I also bought some sperm whales teeth. The neighbourhood of this group used to be a favourite resort of whalers years ago.

Redfern told me that he had lived at Onoatua seventeen years. He was formerly a chemist in Liverpool. He was living here before the Society sent Missionary teachers here. The population of Onoatua he states to be about a thousand. There are two Missionary teachers and he is on excellent terms with both of them. He says the ~~most~~ bad feeling existing between the traders on Penu & Nukunuan & the teachers is partly the fault of the former but he also says that the rules made by the teachers are of a very arbitrary

of names

character especially as to the observance of
 Sunday. He mentioned an instance where a native
 returning home from the Sunday service was caught
 in a shower of rain. He hung his shirt out to
 dry on a bush and was fined ten bags of copra
 for working on Sunday. In another case the teacher
 interfered between husband & wife in their most
 intimate relations on the question of the desecration of
 the Sunday & refused the man the Sacrament
 I was told that all the natives on Onoatua can
 read & many of them have been taught to write.
 I have already been given two letters by natives
 to take to friends of theirs in Fiji, natives of
 Onoatua who are at work there on plantations.
 A few months ago ~~Yokelan~~ a native of this
 island was executed in Fiji for the murder of
 a planter for whom he was working. Ours is the
 first ship from Fiji that has called here since
 the occurrence and we consequently are the bearers
 of the news. Some of the men's relations were alongside
 in a canoe this morning to make enquiries but
 seemed absolutely indifferent.
 I was told that Onoatua is only now recovering
 from the effects of a ~~long~~ series of 4 years of
 drought. The wells, such as they are ceased to
 give any ~~water~~ fresh water and the coconut palms
 left off bearing. Many people died.
 Last night we had a shower of rain and again
 another to night, but with this exception we have
 had no rain since leaving the Ellice Group
 on the 23rd March.

The insects on Onoatua are precisely the same
 as those I have seen at the other islands and
 the same species of shore birds are common

Deefern says that curlews are seen occasionally. There are no indigenous land birds but Deefern has introduced pigeons. They live about his house and find their own food on the reef at low water. He also keeps two or three dogs on his own little island but the natives in one of their law making moods issued an order that all their own dogs should be killed. The reason alleged being that the policemen were afraid of them. Another order decreed the destruction of all the fowls because they nibbled the leaves of the young taro plants. Personally I should have preferred the fowls to the few roots of very inferior taro that struggles for existence on these islands. It is not the proper taro ~~but~~ (*Caladium esculentum*) but more resembles the plant called *via* in Fiji eaten only in times of scarcity. ^{It is I believe *Caladium cordifolium*} It takes about four years to come to maturity and the roots are then about eighteen inches or two feet long & about as thick as a man's thigh. It is hard & dry when baked. ^{The natives call it} ~~It is called~~ by the Samoan name "Popoi".

Friday 2nd May I remained on board all day as I was not feeling well. The ship was to stop in Copra and very few natives came off to us.

Two more letters were entrusted to my care for ^{on behalf of} ~~the~~ natives working in Fiji. Shore natives that did come off asked me if we were recruiting labourers for Fiji. Had we been doing so we could have filled the ship ~~however~~ at Makurau. I have enquired of the natives where they like going to work best. They all say they like going to Honolulu & to Fiji but do

not like going to Samoa. They give the preference to Fiji but this may be because they know we come from there. However wherever I have made enquiring I have found them unanimous in their objection to Samoa.

Saturday 3rd May. The water round the ship was this morning swarming with medusae. By the aid of a bucket I caught some for examination. In spite of careful handling I was stung by one of them and my fingers tingled afterwards though I had touched a nettle. Jack ^{Gilbert's} ~~our~~ ^{id. sailor} ~~shelton~~ tells me that his people eat the Medusae I caught and therefore the trader told me that there is another kind that only appears during the first quarter of the moon and when there is no current of which the natives here are especially fond.

at 7. A.M. we weighed anchor and laid a course to take us to the eastward of Tapetewea. The S.E. end was in sight at 4. P.M. and all night we coasted along the eastern side of the island distant about 7 miles from the shore.

Sunday 4th May at daylight we were off the N.W. end of Tapetewea which was distant about 9 miles. As the wind was fair for Noumouti we set the square sail. This is the first time during the voyage that ~~the wind has been fair enough~~ ~~oft~~ to me have set this sail. The first attempt we made to set it having resulted in an accident

The present chart (1893) records that the Cadama struck on a rock ~~near~~ the previously unrecorded somewhere near the position we must have been in at this time. Being so near to the surface

it must certainly break except ^{perhaps} in the calmest weather but we saw nothing of it and of course knew nothing of its existence so that no special look out was kept.

At 8.30 the South end of Monuti was in sight right ahead. As we neared the land we saw a schooner at anchor in the lagoon.

The sight from the mast head was at this moment very pretty. On our right was the long low island wooded with coco-nut palms extending away out of sight to the northward. Near the land the pale blue water of the lagoon, then nearer to us the reef also ~~fact~~ ^{extending away} out of sight in the distance & outside the dark blue waters of the open sea. There appeared to be an entrance and we stood towards it but the water shoaled to three fathoms then to $2\frac{1}{2}$ then 2 and then $1\frac{3}{4}$ we were afraid of striking so we came out again and coasted along the reef to the N.W. The schooner inside the lagoon had ~~made~~ made sail & was proceeding up to the north end of the lagoon along the land. About half past five we had the small island on the reef bearing N.E by E distant about four miles & we could see the bottom. There appeared to be an extensive flat extending some distance to the westward of the reef. As night was coming on and the captain did not care to repeat our experience of the morning, he decided to stand right on to Apauana. The schooner we saw in the lagoon was a larger vessel than the "Patience" so that there must be a passage into the lagoon but we failed to find it.

Monday 5th May At 6 o'clock this morning ~~the~~
~~island of Apurama~~ ^{land} was in sight from the mast-head
 we supposed it to be the island of Aramuka and
 accordingly sheets were drawn aft for Apurama
 which lies about fifteen miles to the N.W of Aramuka
 we crossed the equator about 6.30 and are
 now consequently in the northern hemisphere
 after standing on till nine o'clock by which time
 we expected to see land right ahead, but not
 seeing any we came to the conclusion that the land
 we sighted in the morning was Apurama and not
 Aramuka. Apurama lies ten miles further to the
 westward than ~~it~~ ^{was} shown in the ~~chart~~ chart (1884)
 Hence our mistake. We accordingly bore away for
 the land and soon reached it. We ran along outside
 the reef at the south side at a distance of only
 about two hundred yards from the breakers
 until we came to a small ~~island~~ island on the
 reef. This island is a good mark as the passage
 into the lagoon is situated just to the west of it.
 We were off the entrance to the passage about
 twelve o'clock and two natives came off to us
 in a canoe from the small island, but would
 not come on board. The water was very clear
 so that we could see every stone upon the bottom
 and we had no difficulty in beating through ~~it~~ as
 although the wind was blowing right out there was a
 very strong flood tide making in.

This passage ~~has~~ was shortly afterwards surveyed
 by Lieuts. Moore & Beresford of H.M.S. Dart.
 We anchored in the lagoon about four o'clock in
 2½ fathoms of water on a white sandy bottom
 about two miles from the most eastern island of the
 lagoon. We landed in the boat at a place

x Verify

where formerly a Chinese trader used to have a store but found that he had left. We saw hardly any natives but at last we met an old man and two or three old women. They told us that the King and nearly all the people had gone to Kuria to build new houses, only the old people had been left behind. We saw a very well built ~~stone~~ house of hewn stone built apparently by a mason but unfinished. The captain said it was in the same condition at his former visit seven years previous.

The vegetation & general appearance of this island is precisely the same as the others we have visited but I was struck by the healthy appearance of the coconut trees. So thickly & so luxuriantly do they grow that it appears quite gloomy beneath their shade. They cover the whole island & extend in one unbroken grove along the narrow island to the north west as far as the eye can reach.

I noticed a shrub that I had not previously seen in the Gilberts (*Scaevola acidula*) and a few man groves, but the sandy soil does not appear to suit them and they are very different from the mangroves that one sees growing in the rich alluvial mud elsewhere.

As we were returning to our boat across the soft sandy flat exposed at low water in the lagoon we heard a shout and saw a man coming towards us who we at first took for a white man as he was dressed in European clothes. When we got near to him we found he was a native. He stood about 6ft 6 in high & was big in proportion and was altogether a

remarkable looking man. He had one of the most villainous looking faces that I have ever seen. Our man Jack the ^{Gilbert Islander} ~~Yak~~ who was with us and to whom the man addressed his questions appeared almost paralyzed with terror while he was talking to him & ~~turned~~ a livid ashy pallor came over his features. He explained to me in subdued tones that he was a Missionary teacher, ~~and a native of Makin~~. I heard afterwards from Tebuck the King of Apamama secretary, formerly his executioner, that this individual's name is Moses. He is a native of Makin and has lived at Apamama about seven years. Shortly after his arrival here his conduct to the women became of such a nature that Tebuck was sent to remonstrate with him and to insist upon better behavior. Upon which he married a wife and has since then been better behaved.

See later p. 82.

Tuesday 6th May At 6.30 this morning we weighed anchor and proceeded to the principal settlement nearer to the north end of the lagoon. There are a few patches towards this end ~~of~~ but in the bright blue water anything near enough to the surface to pick up a vessel with the draft of water of the "Patience" is easily seen. The water was exactly the colour of Cambridge blue but was not so clear as in the passage. At a depth of four fathoms we could not see the bottom. The reason is that the floor of this lagoon is covered with a sedimentary deposit of ~~imperfectly~~ a greyish white mud ^{fragments of echinoderms & their spines} among which is full of ~~the small spines of~~ ~~and shells of echinoderms~~ ~~a species of echinoderm~~. I brought some samples of it away with me.

by Echinoderm spicules

As soon as we cast anchor I went ashore with the captain. In a small house ~~near the shore~~ raised

on posts about four feet high we found the King's ~~brother~~ brother. There were also his sister and a younger brother. All three looked half idiotic and would have been in danger of being taken to an asylum if they had been found loose in any civilized country.

The King's brother was a big heavy looking man, He was dressed in a voluminous pair of blue cotton trousers and a dirty white calico shirt with a horse-shoe pattern upon it. ~~His wife was a big plain~~

The King's mother was also present, ^{a most ferocious looking old creature} dressed in an old red cotton sacque gown. ~~She looked a most savage~~

~~the~~ The the back ground were two rather good looking young women ~~with luxuriant long straight hair.~~ They engaged in the very feminine occupation of assiduously combing their luxuriant ~~straight~~ black hair, and at the same time, horrible diction, enjoying every phase of a branch of sport that may be witnessed any day in a monkey house.

Great slices of a sort of cake made from the prepared fruit of the pandanus were set before us. I found it very stodgy but felt bound to eat it for fear of giving offence. And a liqueur resembling flat muddy beer made of a mixture of molasses and water.

Jack our ^{Gilbert Id.} ~~boatman~~ sailor acted as interpreter. After a long talk the King's brother said he wished to sell fifteen bags of copra but the King must know nothing about it.

After sitting and staring at one another for an hour I suggested that I should take a walk.

I found the village long & straggling but there were some very well built houses. I saw few natives as most of them had gone with the King to Kuria. A few men were engaged upon

Canoe building. ~~The canoe being the chief feature~~
~~of the place~~ in which the Afamama natives
 excel. I saw several of the large sailing
 canoes each one carefully stowed away in a
 thatched house to protect it from the sun.
 I measured the largest of them, and found the
 dimensions to be Length 42 ft. Depth from deck
 to keel 6 ft. width on deck 6 ft. Length
 of outrigger 50 ft. Diameter of outrigger 18 in.

Distance of outrigger from hull 30 ft.
 The side of the canoe facing the outrigger was nearly straight, the other side was gracefully curved.
 There was not a nail or a peg in the whole canoe

It was all tied & sewn together with sinnet

It was ornamented all round the gunwale and at
 the stems with white cowries (ovulum ovum)

The timbers were fitted & fastened to the keel
 with sinnet & the planking was in small pieces
 most accurately fitted together with leaves of the
 Pandanus inserted between the seams & the whole
 drawn & tied tightly together with sinnet. The thickness of the planking was about 1 in.

The mast was of several two or three pieces of
 Pandanus stem, and the huge triangular mast
 sail was plaited from the leaves of the same trees.

The King's house was well built in native fashion
 but with European window & door frames

It was quite dismantled. There had been at
 one time a boarded floor but it had been pulled
 up & probably used for canoe building.

The house contained nothing but nine sewing machines
 most of them in their original cases and all of
 them ruined with rust. Three or four cases of
 empty gin bottles and two baskets of pink and
 red coral.

Having done the village, after an unavailing
 search for anything new in the insect line I

returned to the King's house where I found the captain still discussing the question of espra. Eventually however it was weighed out and we returned on board, the King's brother following in his own boat. The payment for the espra brow took nearly two hours to adjust and was made chiefly in cotton print.

We are to start in the morning for Kuria where the King is. It is distant about 20 miles to the westward. Some years ago the King's schooner the "Coronet" started from Apurama at dusk to go to Kuria with one white man on board and over a hundred natives. There was a strong current running to the westward and but little wind and in the morning they had drifted past both Aramuka & Kuria. They knew they were to westward of the islands but could not see them as at daylight the sun would be in their eyes and they kept drifting further westward all the time. The white man knew nothing of navigation and was not able to determine the ship's position. 4 or 72 days they beat & beat to windward against the current without sighting land till most of the natives were dead or eaten and then in despair they let her run before the wind and in twenty four hours they sighted Nonouti. The white man died soon after they arrived at Nonouti.

About two years ago the King of Apurama gave a passage to Fiji in the "Coronet" to the shipwrecked crew of the labour vessel "Rose". but she was herself wrecked on the Astrolabe Reef off the island of Kaudava in Fiji.

I never saw coco-nut trees grow stronger anywhere

than they do on Apamama and they appear to be loaded with nuts. The annual production of copra from this island must be very large and as it all belongs to the King it is not to be wondered at that he is able to keep schooners of his own. He used to have a steam launch but she sank at anchor in the lagoon on account of some valve being left open & they were never able to raise her.

During our stay here the people have been very shy $\frac{2}{3}$ in communicating with us and not a single canoe has been off to the ships. I expect it is due to the absence of the King, they are probably acting under his orders.

The King's brother again impressed upon the captain not to pay anything to the King about his selling copra and wanted at first to wait till after dark before shipping it.

X Spathe? I saw the process to-day of ^{draining} making toddy from the coco-nut trees. The spathe of the tree is tightly bound round with sinnet while it is yet in flower. The tip is sliced off and a coco-nut shell suspended from it. The flowers from being tightly wrapped in sinnet are unable to develop into nuts & consequently all the sap drips out into the suspended shell. The shell is removed full about twice a day when a small piece is always sliced off to allow the sap to run more freely.

The draining of toddy is a very exhausting process for the tree & a tree so treated yields no fruit. When fresh mixed half & half with water it is an agreeable drink something like ginger beer. If kept it ferments & becomes intoxicating.

and eventually turns to vinegar. We are using it on board in place of yeast for breadmaking. This practice of extracting toddy from the coconut trees is only so far as I know met with in the Pacific among islands having a Micronesian population. It is unknown I believe among the Polynesian ^{islands} ~~islands~~, but it is possible that in a few instances where the races mingle ~~the~~ toddy making may have been introduced among them ~~Polynesians~~.

The only birds that I saw at Apamama were a pair of curlews on the sand flats at low water and some plovers & sandpipers and the crane ^{*Demicorytha sacra*} of both the black & white variety. There were also in the bush plenty of fowls that got up and flew like pheasants. They appear to be quite wild and frequent the beds where the taro is planted.

Wednesday 7th May at 6.30 we weighed anchor and sailed for Kuria going out of the lagoon through the passage in the reef towards the north west end. This is marked no passage in the chart, but for small vessels it is perfectly safe. We were assisted by a strong tide running out. When clear of the reef we laid our course S.W. by S. for Kuria.

The island of Kuria to which we are bound and the neighbouring one of Aramka now belong to the King of Apamama. The present King's father became possessed of them in the following way. They always produced a great quantity of coconuts but the natives would not trade with white men. Accordingly the master of a Sydney ship named Fairclough suggested to the King to

of Ceylon
of Malay
origin
toddy
chreulele

go and take possession of them. So the King
 and a mob of his people went on board the
 traders ships and sailed for Kuria. on arrival
 they fired off guns & cannons and so frightened
 the natives that they all left the island some in
 canoes and others swimming out to sea. Most of
 them were drowned and the island was then
 & there taken possession of. The same course was
 adopted at Aramuka. The King then peopled
 the island with some of his own subjects
 limiting the number on each island to a hundred.
 when the ~~number~~ ^{population} exceeded that number he
 used to take some back to Apaanama.
 About noon we passed Aramuka and at
 2.30 we were off the south end of Kuria
 when we were near enough to the anchorage a
 boat came off bringing a native who said
 he was the Pilot. He handed the captain
 a written note book which contained the
 "Rules & regulations of the Ports of Apaanama
 Aramuka & Kuria". The most important one
 being that a charge of 5 dollars was imposed
 for anchoring. The boat also carried a large
 flight of steps which was hauled on board
 and made fast to the counter ready for the
 visit of the King. Another boat now approached
 with the King ^{Timbenoka} on board. He wore a white
 cotton shirt without collar, white trousers
 a black cloth coat evidently home made
 black slippers and socks and a broad
 brimmed hat of plaited pandanus with a
 band of peacocks feathers round it. He
 was an enormous man weighing I should say
 25 stone. He bore a strong family likeness

to his brother but whereas the brother was semi idiotic the King appeared to be a man of intelligence.

The flight of steps were not needed as we were so low in the water that when he stood up in his boat he could easily step onto our deck without their assistance.

As soon as we anchored he went into the cabin accompanied by his secretary and desired to see the book of trade.

Calico ^{print} was what he appeared most in want of. The King had a pencil & note book, the secretary a slate. The length of every piece of cloth was put down by each of them then the total lengths were added together, laboriously multiplied by the number of cents per yard and then divided by the price to be paid for the copra. The King was pretty expert at his figures, but the secretary performed the simplest sum in divisions, even when dividing by two, as though it was a sum in long division. It was a tedious process and the cabin was very hot. The King especially being in a very melting condition. At six o'clock we adjourned on deck for tea. The royal appetite evidently corresponded with his size. It was immense. He began with a tin of salmon all to himself then two or three slices of salt junk next about half a dozen sheep tongues finishing up with butter & biscuits. Noticing a pair of binoculars on deck belonging to the captain. He took them up saying "They belong you? I want em". The captain replied "all right King You take em". It would not have done to refuse him as it would at once

have put a stop to the trading. After
 tea the trading again proceeded till 8 o'clock
 when we went on deck again. He then called
 me to sit down beside him and said that
 his Missionary would say a prayer. This lasted
 about five minutes and then he and his
 following went ashore for the night.

He has only recently allowed the Missionary teachers
 here and his religion is probably very superficial.
 At the captain's last visit seven years ago
 when asked his opinion of the missionaries
 he said "Missionary no good, very good I King,
 one man one talk".

While we lay at Apamama the captain
 pointed out to me the grave of one of his
 wives whom he killed during the captain's former
 visit. He had made some reply to a remark of
 the King and he walked up to her in the
 house and holding a revolver to her ear shot
 her dead on the spot.

On the evening when the captain was on board
 his ship they heard the King bellowing like a
 bull. They went on shore to enquire the reasons
 and found the King overtaken by remorse giving
 vent to his feelings in this manner. Upon
 seeing the captain he enquired how long it
 was customary to bewail the loss of a wife in
 his country. He was told that a white man
 would not cry more than one day. "Very well"
 said he "tomorrow I finish" and he accordingly
 did.

I have been able to gather the following information upon
 the recent fighting that has taken place upon the island
 of Noumea.

It appears that about 200 natives belonging to the islands of Niua & Apiaung whose time of service on the plantations in Honolulu had expired were brought back by the Julia (the ship that was wrecked on Nukunau) and most improperly landed upon Honouliuli. The leader of these people was a man named Kalakama. This man got half the natives of Honouliuli on his side and with his own people made war on the other half.

Messages were sent to the King of Apamama for assistance. The King at once went down in his own schooner the "Kate Macgregor" commanded by a man named Hayward and after summoning the chief Kalakama to surrender he attacked them with the result that Kalakama was killed and several men on both sides. The King of Apamama now claims the whole island and keeps his schooner there to enforce his authority. This was the schooner that we saw in the lagoon when we passed the island. The remainder of the Niua & Apiaung people were I am told sold to a Honolulu ship and taken back again to the Sandwich Islands.

Thursday 8th May. At seven this morning the King whose name by the way is Timberraka came off to us again with some of his people and presently five or six of his wives came in another boat. Although nominally a Christian he has 40.

The King bought some more trade goods, chiefly shirts trousers and knives. At breakfast the King's appetite was of the same capacious description as it had been at dinner. Immediately after breakfast the King's missionary or chaplain said the same prayer as before. About ten o'clock I went ashore with the Pilot taking my gun to try and shoot some of the wild fowls with the King's permission.

I found the town was situated on the island of Oneaka a small island separated from Kuria by a narrow channel that can be walked across knee deep at low water. The king explained to me that it was placed so as to catch all the breeze possible. When I landed it was low water and the boys were amusing themselves in the shallow water on the reef flat in sailing toy canoes. ~~The~~ Indeed not only the boys but the men too were engaged at this pastime brought by long practice almost to a science. The toys are most carefully & ingeniously made. The body of the canoe is a mere shell about two feet in length made of the leaves of the Pandanus carefully strengthened by wooden ribs. The outrigger is a foot in length & made of a solid piece of wood. It is placed at the apparently unproportionate distance of about 5 ft from the body of the canoe. The sail of very light pandanus matting is triangular and also out of proportion to the size of the canoe ~~being~~ ^{nearly} about five feet along each side of the triangle. The mast that ~~supports~~ ^{carries} it is ~~supported~~ ^{supported} up by stays that are carried out from the canoe fore & aft on spits ~~—~~. The boys carry them up to windward to the starting point five or six starting together. They are then placed in the water and the trim is adjusted according to the strength of the wind by adding or taking away one or two small green coconuts from the top of the outrigger. At a signal the canoes are liberated and they simply fly before the wind at the end of the course other boys stand ready to catch them. I never saw the whole number arrive safely as some always ran themselves under water from the pace at which they

were travelling. It is certainly a capital way of teaching the boys the management of the sails of the larger canoes.

I crossed over to Kuria and for two or three hours wandered in the bush but without meeting with any fowls. I heard afterwards that I had not gone to the right place. I found that Kuria was a breeding place of the Noddy (*Anous stolidus*) The nests were built in the coco-nut & Pandanus trees and were to be seen by the hundred.

about two o'clock I got back to the crossing between the two islands but the tide was now high and a strong current running through to the westward so I did not care to attempt to cross with my gun etc. so I took off my clothes and batted. I had been in the water about half an hour when three native ladies appeared who wanted to cross to the town. They saw my clothes on the shore and seemed to enjoy my position as of course I could not come out of the water till they left, although to tell the truth they had hardly any more on than I had. They had shouted for a boat to take them over. At last they moved away to a little distance and ~~we all crossed over together.~~ while I put on my clothes and we all crossed over together.

The King was now on shore again so I went to call upon him. He was now dressed in a long red dressing gown and was lying on a mat before the door of his house. He was giving directions about the keel & stem parts of a canoe which had been brought for his inspection. The keel was in three pieces and

the stems also separate, the whole being most accurately fitted together & fastened with sinnett. Before the house were two 4 rivate Birds on Perches tied by the tail with lines of coco-nut fibre. Two puppies & three cats fought for fish bones near the door. The house was well built in the native fashion at one end there was a raised chair about three feet high the whole width of the house used as a sleeping place and upon this there also stood an old wooden four post bedstead for the King's own use. Upon the chair stood a sideboard with white jugs & basins and some common glass at the other end of the house was a raised platform under the roof approached by a ladder where were shown some beautiful specimens of mats quite as fine as Proterochloa mats. My mouth watered for them but I did not like to enquire if they were for sale. About the house were several barometers thermometers & two or three clocks in varying stages of decrepitude. While I was talking to the King the captain came in and the King gave us each a bottle of beer. he returned on board about four o'clock. Close to the shore is a tall flag-staff used to make signals to Apamama. It is a marvel of native ingenuity. It is composed entirely of stems of the Pandanus lashed together with coco-nut fibre. As it is rare to meet with a Pandanus over 30ft high, even here where they grow taller than any I have seen elsewhere, the number of joints must be considerable. It is 168ft in height & had been 180ft but the top was considered unsafe so it was shortened. I counted more than 30 guy ropes that helped to support it.

Friday May 9th I did not go ashore till after one o'clock. During the morning the King sent a man to collect some more trade, tobacco & scissors etc. We have only taken about a ton and a half of copra from Kuria as we are to return to Apamama for the remainder of our loading. I bought two excellent Pandanus hats resembling Panama hats, for one I gave a trade shirt value 2/- for the other a dollar. The latter I wore for years after during my residence in the Solomon Islands.

When I landed in the afternoon the canoe races were again going on but the King was asleep & could not be disturbed so I amused myself watching the racing till he awoke. I had taken him a box containing needles & thread buttons soap fish hooks tooth brushes etc as a present and he gave me four good meats ~~for myself~~. His ~~wife~~ chief wife was present and sat next him on the dais smoking a pipe. He would fill her mouth with smoke and then putting her lips to the Kings blew the smoke into his mouth. I certainly thought it was the most singular way of enjoying tobacco that I had ever seen. I sat and conversed with him for some time and then he magnanimously handed me the Keys of his store house & told me to go and inspect it. It was a large native house & the goods were ~~arranged~~ contained in boxes and locked cupboards. Two large presses contained guns & rifles of every sort from the Jones market to the Winchester. There may have been two hundred of them. A large box was full of rifle & revolver ammunition. There was a chest

of drawers full of Swedish matches and another
 full of chemille hair nets lamp wicks and
 property of very imaginable description on the floor
 were several sewing machines several cases of gin
 and a cask of tobacco. There was also a survival
 gun with a bore of about an inch & a half
 and a box of canister ammunition for a small
 field piece. ~~When I returned to his~~
 that the only things I at all desired to possess
 were two very fine spears made of co-co-nut
 wood armed at either side with a row of
 very large sharks teeth. These were the
 weapons used by these natives before the introduction
 of fire arms. When I returned to the house
 the King asked me what I thought of his stores.
 I said he appeared to have some thing of
 everything. He gave me a bottle of beer
 and then in the fulness of his heart reached
 up to a shelf near where he was sitting &
 brought down a bottle of Marschino. He filled
 two tumblers full one of which he handed to
 me & the other he drank off at a draught.
 I was embarrassed to know what to do with
 mine so I sipped a little of it and left the
 remainder. He made many enquiries after
 the Queen & the climate of England and
 produced a colonial newspaper with a
 portrait of Her Majesty. After talking for some
 time longer he sent me off to the ship in his
 own boat, and later in the afternoon came off
 himself. Just as he stepped on deck he saw two
 Frigate Birds hovering over his house and immediately
 returned on shore in a great hurry saying that they
 were wild birds attracted by his two captives and that

he was going to try to catch them. (See elsewhere for remarks upon Frigate Bird.)

The King returned in time for tea. He was dressed in a grey tweed coat & trousers made by his own people and a white jersey. In the middle of the meal he suddenly jumped up and announced his intention of going ashore. Whether he was annoyed at some thoughtless remark made by the mate or whether the polling of the ship was the cause I could not quite make out. Before leaving he took off his jersey and gave it to Jack our ^{Gilbert Id.} ~~Shelton~~ sailor.

Saturday 10th May. Went ashore with the Captain at six o'clock to take leave of the King. I saw on the beach a howitzer & a cannon that I had not previously noticed. The King was serene and seemed in good spirits; The accounts for copra were finally adjusted and we returned on board at 4 o'clock.

In taking leave of us the King said that if the Captain returned again there were four things that he wanted, 1st the lower mast of a ship to make the foundation of a flagstaff. 2nd A sewing machine strong enough to sew boat sails. 3rd ~~one big dog~~ Plenty of ammunition. 4th ~~one big dog~~ stretching out his arms to their fullest extent, "one big dog I think one fathom long" He also asked for some stramonium cigarettes to smoke as he is a sufferer from asthma. We are taking from Kuria ^{six} five of the King's people as passengers. Tebuck ^{the King's} secretary, formerly his executioner, with an order to the King's brother at Apamama to deliver to us the proper quantity of copra. Tebuck's wife another man who calls himself a missionary teacher and his wife, another woman & a boy.

I was told by the natives that the Apamama women have very few children and that they have been in the habit of adopting children from Noumti.

This appears to be somewhat exceptional in this group as elsewhere among the Gilbert Islands I have found large families, ^{with} the rule. ~~The same native also told me that~~ he are bound from Kuria back to Apurama and although we ran down in a few hours the distance being ^{only} about twenty five miles it is quite futile to expect to be able to beat back again against the wind & current. Our plan is therefore to sail to the northward until we get into a latitude of about 15 degrees N ^{or there} where we expect to meet with the current that sets to the eastward and then to sail south again for Apurama.

At seven o'clock we weighed anchor & set sail we had a strong breeze from the N. E. all day and steered N by E making a N by W. course and at 6 P.M. Mianua was in sight from the mainmast bearing N. N. W. we expected to have sighted Tarawa during the night but did not do so. This we consider satisfactory as it shows that we are more to the eastward than we supposed, however the captain says that both Mianua & Tarawa are five miles further to the westward than they are shown in the chart.

Sunday May 11th A fine morning with strong N. E. breeze we have now got into the easterly current consequently we have made a westerly course since yesterday and at noon we found ourselves to the eastward of Maraki Position 2.13 N 173.58 E. The atmosphere here appears to be denser than we have met with further south. At six this evening we went about & stood to the S. E.

Monday May 12th At six this morning we went about again & stood to the northward. At noon we found we were four miles further to the westward than our position of yesterday so that we have lost ground.

There is not so much wind as yesterday nor is the sea so lumpy but it is stuffingly hot. I now find it quite impossible to remain in the cabin even for a few minutes at a time the smell & heat from the copra being quite unbearable. When the wind is off it is not so bad but when we are steering by the wind as we are to-day & yesterday the current of air sweeps from the hold into the cabin & makes the atmosphere stuffy.

Yesterday 13th May. Weather the same as yesterday. At noon we had made fourteen miles to the eastward.

Wednesday 14th May Still trying to beat to the eastward but with poor success. At four in the afternoon we had a smart squall from the S. E. with rain and we had to shorten sail. ^{By} towards evening the wind knocked up a nasty sea & we took a good deal of water on board but on the whole the "Patience" behaved very well.

Thursday May 15th

Towards morning the wind & sea moderated and we took out the reefs in the mainsail & reset the topsail. By three in the afternoon we were laying our course SE by S. Our position at noon was 4.45 N 174.55 E. This is the farthest north that we have been and if we had stood on much further we should have run out of our charts.

at 5 the rain began to pour down again and lasted till eight o'clock but brought very little wind with it. The characteristic of the weather in these latitudes ^{or waterspouts.} appears to be light winds with heavy rain squalls. Although we have been near them we have not sighted any of the islands of the Marshall group. This I regret as I think they would prove more interesting than the Gilberts from an entomological & botanical point of view especially as I am told that some of them contain high land & are something more than mere coral reefs. Rain again nearly all night.



~~Thursday~~ 15th May
Friday May 16th night

A fine morning after the rest uncomfortable
Very little wind, what there is being from E.S.E. We
are laying S by E. There is a long swell coming up from
the eastward an indication that there is probably more wind to
come from that quarter. At noon we found by observation
that we were ten miles south and twenty miles further to
the eastward of our yesterday position. Towards evening the
wind got round to the N.N.E & we were at last able
to see off the sheets and steer direct for Apamama.
We find that the eastward current is pretty strong here
& is being as well to ~~the~~ eastward, windward of Apamama.

Saturday

17th May. We have been bounding along all day
with a splendid breeze. Course nearly south.
At noon Apamama was 150 miles distant,
we appear to have run out of the rainy district
again as we have seen no rain squalls about all
day.

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Sunday 18th May. Same breeze as yesterday but not quite so strong. At noon Apamama was distant 35 miles and at 4 P.M. we sighted the land from the northward.

Monday 19th May During the night the breeze gradually died away and at 2 A.M. we were becalmed off the S.E. end of Apamama having come down the eastern side of the island during the night. We were in great danger of drifting ashore with the current so we got the boat out and she just managed to tow us clear of the S.E. point, but at sunrise a light drain of air from the north sprang up and with the help of the boat we managed to get along as far as the passage. Thus we have been nine days getting back from Kuria to Apamama although it only took us seven hours to get there. But experience has shown us that it is absolutely futile to try & contend against the westerly current. As it was we nearly missed the passage and if we had done so should probably have had again to stand to the northward.

When we were well in the entrance of the passage a native pilot came on board and proceeded to issue orders in Pidgin English, such orders it is needless to say being taken no notice of as we kept a man at the masthead to look out for patches. "Too much salt water he stop along this side", meaning that there was plenty of water for the ship in the direction indicated. "Too much stone he stop", indicated a rock or patch to be avoided. "Very good you put him up the other street", was the intimation that it was time to go about. I suppose as the charge of 5 dollars for pilotage is imposed they think themselves bound to do pore tings towards earning it. As on our former visit

We found a four knot tide setting through the passage which soon carried us inside. In the clear water the coral on the bottom was a sight to remember as soon as we were well inside the wind died away altogether so the boat was again requisitioned to tow us up the lagoon to our anchorage.

It was a tedious business & occupied the whole day. The weather was overpoweringly hot, quite the hottest day we have had since we left Fiji. The crew of the boat were relieved from time to time & taking my turn with the others and at last at 5 o'clock we anchored in 5 fathoms ~~off the Kings~~ ~~valley~~ a mile from the shore. Our passengers from Kuria got ashore as soon as the anchor was down.

Thursday May 20th The boat went on shore early in the boat to load copra & I went in her for a walk on shore

I found rather more indication of vegetable mould on this island than on the others of the Gilberts that I had visited. In some places the bush was quite thick & the trees afforded a grateful shade. The great taro that they cultivate is grown in large trenches the ~~sand~~ ^{sand} being removed to a depth of ~~five~~ ^{ten} or ~~six~~ ^{twelve} feet so that the roots may benefit by what little moisture there is at that depth from the surface. The leaves of the taro had been much eaten by the larvae of a moth

() I saw several of the wild fowls they seemed to haunt the neighbourhood of the taro beds but I had not brought my gun. I next returned to the village and examined some of the great sailing canoes similar to the one described above. On the beach in front of the village were ten or twelve old ships canoes in various stages of neglect & decrepitude.

I was told that since we had been here a fortnight ago the King's brother had gone down to Kuria with nine of the large canoes. I was also told that two boats left Kuria for this place three days ago, one of them reached here last night but the other has not turned up yet.

The man whom the King sent with us from Kuria to superintend the delivery to us of the copra used to be, he tells me, the King's executioner. His name is Tebuck, ~~and~~ he has put a great many people to death and appears rather proud of his office. He says he used to use a tomahawk for the purpose.

After ~~leaving~~ bringing off two boat loads of copra we moved to another anchorage near the King's village to bring off the remainder but we had to anchor before we reached it as the darkness overtook us and we could not see the coral patches in the dark.

Wednesday May 21st. Reached the King's village soon after daylight. Some large canoes were in sight outside the reef to the westward and they proved to be the canoes from Kuria with the King's brother + his people on board.

I went on shore after breakfast and sat for some time on the beach watching the canoes beat through the western passage and then across the lagoon to the King's village. It was a beautiful sight as I sat under the shade of the coconut trees looking out upon the pale blue lagoon quivering in the bright sunlight of a cloudless day, on my left was the deep green of the coconut trees stretching away ~~in a~~ long line to the southward as far as the eye could reach until they faded out of sight below the horizon, ~~and~~ on the right the long line of white foam breaking

on the reef, ~~and~~ beyond the dark blue of the open sea. and on the waters of the lagoon the nine great canoes moving as majestically as ~~any~~ ^{no many} yachts their great yellow triangular mast sails standing like boards and gradually creeping

* up to the village. The first to arrive contained the King's brother and thirty natives ~~and an~~ ^{and} ~~all~~ ^{one} of them an albino the son of the King's sister.

The last canoe did not reach the beach till two o'clock. When enough had landed the canoes were carried up one by one & stowed away in their respective houses. ~~Down~~

During the morning I walked along the shores of the lagoon nearly as far as the western passage but saw very little of interest. In the shallow water I found some ^{species of} echinurus of great beauty ~~but~~ with spines about three inches long but so fragile that I could not move them. As the tide rose and drove me off the reef I returned through the lagoon and came across some mangroves growing in what would have been a swamp anywhere else, but here it was as dry as a bone and the mangroves evidently showed by their pithy appearance that their surroundings did not suit them. The seeds ^{of their ancestors} had been floated to this island sometime by the current & they were doing the best they could under the circumstances.

I looked into two or three collections of huts as I passed but found them tenantless except in one instance where two old men & a woman came out to me, the two former perfectly naked & clamoured for tobacco.

When I got back to the King's village I met the native who had piloted us to our anchorage at Kuria. He had come up in one of the canoes. During our stay at Kuria he had attempted to

* The sails of these canoes are so finely plaited that Capt. Marshall of the Scarborough thought they were made of silk.

hang himself so I suppose a change of scene was considered beneficial in his case.

I was taken to see the King's uncle who was suffering from a very bad skin disease and I was asked to give him something for it. Unfortunately the ship's medicine chest was sold to the trader on Onotou after we had landed the last of our passengers it being supposed that we had no use for it. The only thing I have with me likely to suit the case is undiluted carbolic acid. The following news has been brought from Kuria.

Since we passed Nonouti a trading vessel from Sydney called then belonging to a Chinaman in Sydney. They wanted copies from the King of Apamama's native trader on the island, but in consequence of the recent fighting none had been prepared.

It appeared that the King owed copies still in payment for the steam launch he bought some years ago. Accordingly the vessel went on to Kuria & upon the King's secretary Robson going off to her he was forcibly detained. The King then sent his wife & two children off to him and the ship sailed away with them. It certainly appears to me to be a very high handed proceeding & quite illegal. There appears however to be some doubt as to the identity of the ship, as I doubt tells me that it was not a Sydney ship but a San Francisco schooner the "Ariel".

Thursday 22nd May went on shore after breakfast taking my gun to shoot some wild fowls. I found them by no means easy to kill as they are very shy they will not rise but run off among the bushes at the slightest noise. I however got three. afterwards as it was very hot I went to sleep.

in an empty house for an hour. The only additions that I have made to my list of the fauna of the islands are a scorpion that I found among the debris of an empty copra store and a small gecko found drowned in a coconut shell suspended to catch the toddy.

In the afternoon I suddenly came upon my former acquaintance Moses. I was surprised to see him at the King's village as he belongs to the other end of the island. He was engaged in the operation of killing a pig. I enquired of Tebuck why he was here and was told that in consequence of renewed bad behavior on his part among the women the King had ~~ordered~~ suspended him and that he was to be sent away the next time the missionary schooner the "Morning Star" called.

In the village I noticed several of the large clam shells (*tridacna* gizes) measuring upwards of two feet across. They are used for breaking the shells of the coconuts upon and are also burned for lime.

On the reef I also noticed a smaller species (*tridacna squamosa*). These clam shells when seen under water with the living fish in them have a most singular & beautiful appearance. The two valves of the shell are then slightly open and the mouth of the fish is seen of a bright deep purplish blue. At first sight this has the appearance of a small blue sucker as the wavy edges of the shell give it quite a serpentine appearance. I also noticed about the town some very large black pearl or mussel shells (*Perna* sp.) but nearly all of them damaged. They are used for scoops. There is a smaller kind found in the sand of the lagoon. They rub them smooth & sharpen them on a flat stone

X!

and they are then used by the women for splitting the leaves of the Pandanus for making mats.

2 | At Apamama & those islands of the Gilbert Group that are under the influence of the American Missionary Society the books in use are the Testament and a book of hymns printed in the language of the Sandwich islands. I have previously mentioned that in the southern portion of the Gilberts & in the Ellice Group which are under the influence of the London Missionary Society they have Samoan books.

In addition to these I saw this afternoon a small book that was quite a literary curiosity in its way. It was a Primer in the Sandwich Id language printed I think in Honolulu. It was illustrated but the blocks from which the plates were printed had evidently done much previous service & were nearly worn out. On the title page appeared a picture of a coral island surrounding a circular lagoon in the middle of which was a ship in full sail. It was either a very small island or a very large ship as the length of the lagoon was only about five times the length of the ship. As the land entirely encircled the lagoon and there was no passage the ship must either have been built there or been washed over the island by a tidal wave. ~~So that unless~~ Another tidal wave would of course be required to wash her out but long before that happened I suspect that the people on board would have been cajoled out of or robbed ~~of~~ of all their "trading" by the natives.

On second thoughts it has struck me that the picture might be a representation of the native idea of heaven. Viz an island with a white man's ship always there & from which it is impossible for the ship ever to get away.

Then follow several pictures of wild beasts of the most ferocious appearance but nothing calling for special notice till you come to the Horse, and he strange to say is represented with a large Newfoundland dog sitting on his back. Now as it is highly probable that very few of the natives into whose hands the book falls will ever have the opportunity of seeing one or the other, it does not matter much, still, should any of them visit foreign countries where horses & newfoundland dogs abound, they might experience a feeling of disappointment upon discovering that the usual seat of the latter sagacious animal was not upon the back of the former.

Next we come to the camel with with a leg extended horizontally to each point of the compass & his toes turned well up, giving one the idea that he is progressing at a tremendous speed, an arab is balancing himself jauntily cross-legged on the apex of the hump. The other ^{invariable} accessories of a camel picture are of course present. In the foreground the skeleton of a "late" camel and in the background on one side two palm trees and on the other a pyramid. Below was the description and although I do not know the arabic language I noticed the word that I know means "ship" in that tongue. I can well imagine how the description set out how the camel was the ship of the desert and carried a supply of water for himself and passengers only unfortunately as it was carried in the hold & the deck was unprovided with hatchesways it became necessary when the passengers felt thirsty to skuttle the ~~ship~~ camel in order to reach the water tank. Probably the skeleton in the foreground was that of a skuttled camel, after which the passenger had either to resume his journey on foot

It, as the Pyramid in all the pictures of canals that I have ever seen appears to be close by to return there for a fresh one, where doubtless a large assortment would be found for sale or hire by the hour or day.

The canal brought the natural history portion of the book to a close and then we have a picture that I instantly recognised as an old friend and which I remember always made a great impression upon me as a boy. It represents a line of negroes standing in what appears to be sheep or pig pens and engaged upon some doubtless profitable occupation. I have a faint idea from the days of my childhood that they were panning for gold or diamonds.

Three men in top boots & broad brimmed hats are looking on seated in arm chairs & smoking cigars. It is many years since I last saw the picture & the plate is evidently nearly worn out as it had a very blurred & muddy appearance, but it has doubtless since then sent a thrill of horror through many hundreds of young hearts, as now appears black as well as white at the atrocities of the slave trade & the cruelties of the demon overseer.

The book concludes with a map of the world on Mercator projection, but unfortunately in common fairness to the rest of the world, there is no room in the Pacific for any island smaller than N. Zealand so to compensate for the omission & in behalf of local interests a special map is introduced upon the next page on which the various groups of islands appear "on a scale of magnificence never before attempted" and all coloured by hand. I tried hard to buy this literary curiosity offering first a shilling then $\frac{1}{2}$ a dollar, then a dollar and lastly my shirt but met with the objection that faces you at every turn on a Spaniard "book belong King".

Friday May 23rd This morning all hands are engaged in painting the inside of the bulwarks & the covering boards. After dinner the mate & four of the crew went ashore to get another cask of sugar and some fire wood. I went with them taking my gun to shoot fowls. I also took a pack to carry the seed & one of the crew to carry the pack. Having found out yesterday the best places I got the man to drive the fowls towards me and he soon declared that he could carry no more. All hands had a sumptuous repast of fresh chicken this evening. In the evening I took came on board to settle up with the captain.

Saturday May 24th At seven this morning we weighed anchor for the homeward voyage. There was a light breeze & we were able to lay E. S. E. in the lagoon to the south passage. Just as we weighed I remembered that it was Her Majesty's birthday, so we took it as a good omen for the beginning of our voyage & drank her health. When we got to the passage about mid-day we found such a strong tide setting in that we were unable to sail against it although we had a five knot breeze in our favour so we had to let go the anchor but as one would not hold us we let go another. About three o'clock the tide slackened & we again set sail the soon cleared the passage & then steered by the wind a S. E. course till dark. Rain during the night.

Sunday May 25th A fine morning but little wind at noon we find that although steering S. E. we have made a course to the westward of south so the current has again got hold of us. Crossed the line early this morning.

Monday 26th May A light breeze all day but calm towards evening & we drifted westward as usual. To while away the time I undertook to paint the inside of the cabin.

Tuesday 27th May. After a calm night the sun rose on a sea in a perfectly cloudless sky upon a sea like glass, not a ripple flicked the surface and ~~there was no swell not even~~ the long swell from the eastward that we generally met with had died away & we lay as though in a pond. All day we were drifting surrounded by countless thousands of small Medusae. Most of them were of the usual umbrella or mushroom shape about two inches in diameter, the trailing appendages being of a chestnut brown or dull orange red. Others were milon shaped and appeared iridescent in the bright sunlight. & repeatedly ~~the~~ one of the curious *Cestum Veneris* or Venus' girdle would come floating by. It is doubtless the presence of all this seeming life in the water that made the neighbourhood of the Gilbert Group such a favourite resort for whalers engaged in the sperm whale fishery at the time when whaling in the Pacific was at its height. I spent all the morning watching the water. At noon our position was 1.30 S. and we had made a S.S.W. course since yesterday. As we are now loaded down with 27 tons of copper, the at most the *Patience* will carry, we have a better hold of the water & do not expect to make so much leeway, but we are quite low enough in the water for ^{comfort} ^{& safety.} The *Patience* is however most emphatically "a bad one to be at" in fact she has proved over & over again during the voyage that she will not beat it all. This afternoon I saw under the ship's bottom a most beautiful pilot fish about two inches long striped in alternate bands of black & the most beautiful ultramarine blue.

Wednesday May 28th a little more breeze this morning but as we were laying no higher than S

we went about eight o'clock & stood N E
 one of the crew caught a small bonito about
 four pounds weight, he had it for breakfast in
 place of salt junk, a welcome change. At
 noon we were 20 miles S & 9 miles W of our
 position of yesterday. Went about again in the evening.

Thursday May 29 A strong breeze from the eastward
 at noon we were 20 miles east & sixty six miles
 south of our position of yesterday.

Friday May 30th A strong breeze all through the
 night and as we are very low in the water we
 have taken a lot on ~~deck~~ ^{board}. This has made
 sleeping on deck rather uncomfortable but I much
 preferred to be out on deck in the fresh air to
 being stifled in the cabin. $\frac{1}{2}$ It was bad below
 when we had the native passengers on board but it
 is if possible worse now with the sweating copper
 & the stifling smell of rancid coconut oil. This voyage
 was my first experience of travelling with a cargo
 of copper. I have since become more used to it.
 This morning we are bowing along with a spanking
 breeze & drying our rags & mats in the bright
 sunshine. At noon we were 17 miles east and 74
 miles south of yesterday's position. Lat. 4.15 S.
 Porpoises were playing round our bows to-day &
 we have seen a good number of both the Boobies
 & Tropic birds.

Saturday 31 May The breeze gradually fell light & hauled
 more to the southward so at 11 o'clock we beat about
 & were able to lay N E by E. At noon we had made
 75 miles S by W. At three o'clock we again went
 about & lay on our former course. We are now in
 the latitude of the north of the Alice Group but
 considerably to the westward.

Sunday 1st June. A fine morning with steady breeze
 Position at noon 68 miles S. by W. since yesterday

Monday 2nd June. 25 miles east & 5 miles south.

Tuesday 3rd June. During the night the wind changed
 towards the N.E. and this morning we are laying our
 proper course S. E. by E. During the afternoon the
 wind died away altogether & left us becalmed. The sea
 had a very peculiar oily looking appearance. During
 the calm I caught in a bucket along side several
 specimens of a small species of Physalia or Portuguese Man
 of war. I immediately recognized it although I had
 never seen it before, but suspected to find it of a larger
 size. However as there are over 120 species known some
 are doubtless larger. One of our Tongan crew said
 that it occurred plentifully in Fiji and was there
 known as the "Salata ma wai" or water stinging
 nettle & warned me not to touch them as they had
 the power of stinging; advice that I disregarded &
 suffered accordingly. They apparently only floated
 on the surface when the sea was perfectly calm,
 for when after a time a slight breeze rippled the
 water they all dis-appeared. They appear at first
 like bubbles floating on the surface and it is
 not till you examine them more carefully that you
 notice the long tentacles & appendages of a beautiful
 dark blue colour hanging down in the water. I
 remember during one of my voyages from the
 Solomon Islands to Sydney we were hoarse to for two
 days off the coast of New South Wales in bad weather
 Several albatrosses were resting on the water under the
 lee of the ship taking advantage of the shelter afforded
 from the wind & waves. I managed to catch one
 & when I got it on deck it vomited a large quantity
 of the Physalia upon which it had been feeding.

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 of those I caught today I placed about half a dozen in a bottle of glycerine & they had undergone no change by the following day. At the same time I caught a most beautiful object the shape of which in the water may be imagined from the ~~of~~ accompanying sketch but the beauty of it is far beyond my power to describe adequately. I had seen one two days ago & another this evening both of which I failed to catch but was now more successful. The body, if I may so call it, is circular & flat, about the size of a three penny piece, from its radiates a delicate gelatinous fringe about an inch in length of a beautiful blue colour & very fragile & delicate. So frail was it that most of it was destroyed as I transferred it from the bucket to the bottle in a spoon. The fringe appeared to be composed of rays resembling the plumes of a peacocks feather but on a small scale, & connected together by a gelatinous membrane. The central disk appears to be of a bony substance & radiates from a central point. The next morning I found that the fringe had all disappeared & what was blue in the body had changed to red.

This beautiful object is known as the *Porspitia*.

^{I noticed also several of those curious insects known as Pelagic Hemiptera.}
 Wednesday 4th June During the night the breeze freshened and this morning we were making good way on our course S.E. by E. at about three knots an hour. Our position at noon was 7.38 S. 175.0 E.

Thursday 5th June During the night we had a change of wind so we went about & stood to the N.E. but at night bells this morning we again went about steering S.E. All our sugar is now exhausted so at breakfast this morning we sweetened our tea with molasses made from the boiled toddy brought from Apawama. Several bottles of it had been bought in view of the present contingency. We found it a most excellent substitute. At noon we were only 20 miles S.E. from our position of yesterday. We went about at noon and lay E.N.E.

During the afternoon the wind freshened from the S.E. and at sunset we had a heavy squall of wind & rain from the same quarter. We are three months out to-day.

Friday June 6th A fine morning with the wind from the east. We are doing about four knots on a S.E. course. At noon we were approximately 8.20 S 175.20 E. about five hundred miles from Round Island Passage in the Fiji group.

Saturday June 7th The breeze blew steadily all night and we made fair progress steering S.E. but making on account of the current only a S by E course.

Since the copra has been on board the cockroaches have to a great extent deserted the cabin and the after part of the vessel & are doubtless revelling among the copra in the hold. Even if the smell & steam of the copra did not make it impossible to sleep in the cabin the myriads of ants are enough to deter anyone from making the attempt. With them the ship now simply swarms. They are a perfect plague. They are in the food, in the tea, in the water, in the sugar (while it lasts) and at all hours of the day & night are crawling over one. It is quite useless to attempt to brush them off as a fresh supply is always on hand. They are of a small black species. On the voyage down I noted three kinds, this one, a larger reddish kind, and a minute black one, but the first mentioned appears to have quite ousted the other two. Our other insect plagues are a quantity of small steel-blue beetles that infest the copra & travel all about the ship. The biscuits are infested with weevils (*Calandra granaria*) and with the larvae & pupae of a small moth, for although the biscuits are soldered up in tins of 40 lbs each supposed to be airtight every one that we have yet opened was found to contain ^{them} ~~weevils & larvae~~ _{one or more}. There is on board another very curious insect, to be of them are to be seen almost at any time flying about the cabin. It is a hymenoptera insect resembling a small wasp. The colour

It is a glossy black and its abdomen is a mere appendage. I regard it as a friend for curious by example in the earlier stages of its existence. It is parasitic within the body of the cockroach. It rejoices in the very appropriate name of *Evevia appendigaster*. Now is this creature the only ~~one~~ ~~that~~ internal parasite to which the cockroach occasionally has to perform the function of host for I have ^{sometimes} found their bodies infested with minute thread worms.

This afternoon we were ~~of~~ accompanied for some time by a sword fish that played round the bows and once as the ship plunged into the sea he struck the anchor with his back. A line was put out baited with a piece of salt beef, but as was to be expected, without success. It was of a different kind to the fish we caught at Peru and the curious fan shaped dorsal fin was absent. The pectoral fins were noticeable in this one for their large size. It was probably attracted by the numbers of small fish that have accompanied us for the last few days. The latter in their turn being attracted by the small crabs & other crustaceans that abound among the weeds that now infest our bottom, for needless to say we are very dirty, and the *Patience* at the best of times a bad sailer is now slower than ever in consequence.

At noon to-day we had done 40 miles S by E.

In the afternoon we were becalmed till sunset when the breeze again came from the S. E. he went about & lay N. E. all night.

Sunday 8th June At nine o'clock this morning a heavy squall came on from the N. E. he lowered the topsail & put a reef in the main-sail & putting the ship about were able to lay E. S. E. The wind & rain lasted all the

morning, and as it set in on a Sunday & with the full moon we hope it will last from the same quarter for a day or two. As there was a heavy swell rolling up from the south when the wind changed into the N.E. it soon knocked up a nasty sea and we shipped a lot of water, but the old "Patience" punched gallantly through it all, and the sensation of more rapid motion was quite a pleasant change after the days and weeks of crawling that we have gone through. Just before noon the wind moderated & the rain ceased and we found that we had made 75 miles N.E. since yesterday our position being $8.48 S. 176.43 E.$ In the afternoon the wind was light but from the N.E. & we made some progress in the right direction. The sun shone brightly & we were glad of the opportunity to dry our clothes after the wetting of the morning. Towards evening the wind freshened again with showers through the night.

Monday 9th June Towards sunrise this morning the wind was blowing strong and a nasty sea got up so that we laboured heavily & took a good deal of water on board. During the morning we sprung a leak somewhere near the stern post but not how down we easily kept the water under by pumping every hour and towards the afternoon as the sea went down we did not make so much water. At noon we had done 65 miles S.S.E. and were in latitude $9.50 S.$ and nearly due north of Botumale.

Tuesday June 10th We have had the same steady N.E. breeze all night & this morning at noon we had made 60 miles S.S.E. $\frac{1}{2} E.$ and were in lat $10.38 S.$ For the last two days I have felt very unwell with a violent headache & fancy I must have had a slight touch of the sun. Being in this state, I suppose, makes me more particular but I should like to know why, when the cook sets out my mug for dinner it is necessary for him to hold

it by the rim with a very greasy & dirty finger
 exactly upon the place where my mouth should go.
 I am however even with him for on this occasion
 I take it in my left hand. Dinner consists of
 the usual salt horse but I do not feel equal to
 attempting any but fancy I could eat a piece of a
 kindred cheese that happens to be ~~not~~ set out with
 the rest of the meal on the cabin top. I ask the mate to
 pass it to me. He appears to think it looks good too
 and on the its way to me he takes hold of it with his
 greasy knife held very low down by the blade & ~~just~~
 just used ~~fresh from~~ for shovelling peas into his mouth. As the piece
 cut off sticks in the tin he hooks it out with his hand
~~just~~ fresh from tarring the rigging. After this I am
 "off" cheese and content myself with biscuits and
 weevils. I hope I shall not have such a fastidious
 appetite tomorrow.

This afternoon we were followed by a small shark. We
 were tried to catch it with a light hook and line
 passed through the bight of a rope. When the shark
 came at the bait it was drawn away from it until
 the sharks body was through the bight of the rope.

The rope was then hauled taut. Unfortunately in this
 instance the hook had not passed behind the pectoral
 fins & when the shark struggled he escaped.

Wednesday 11th June. At eight last night we went about
 and again at six this morning to our old course.

During the night we were followed by two sharks
 larger than the one we saw yesterday. The same
 tactics were pursued as before but with no better
 success so far as concerned one of them as although
 he was noosed the rope again slipped off, this time
 over the tail. The other still followed us but appeared
 to be shy, so as there seemed no chance of catching

line I went to sleep. However at five this morning they caught him. He measured about seven feet long. I noticed last night that the sharks did not turn on their backs in the water to take the bait as is so frequently stated in books but were perfectly able to swim up to it and seize it while swimming in the ordinary way. I had a good opportunity of noticing this especially with the second shark we missed for he was close under the counter & grabbed at the bait several times before he took it. I feel much better to day. At noon our position was only 3 miles from our position of yesterday. The shortest days work during the voyage. This afternoon when examining the fins of the shark caught this morning I found on each fin a specimen of a small parasitical crustacean of a brown colour. They appear to approach not nearly to the Horse shoe & King Crabs of the order Hippidae than to anything else but their size is too small. I have preserved them. Calm all the afternoon.

Thursday 12th June. Very little wind during the night, but it freshened slightly from E. N. E. soon after sunrise. At 9 o'clock we sighted a sail to the southward. It turned out to be a 4 sprail schooner with auxiliary steam power flying the white ensign. She passed about two miles away from us steering north. We found out afterwards that it was H. M. S. Dart bound for Apamama. To enquire into the King's high handed proceedings at Monote. The result, I heard afterwards, was that all his canons and guns rifles were confiscated. At noon we had made 20 miles south, not a brilliant performance, but an improvement upon the run of the previous day.

going to happen next and as the boom threatened ~~in danger~~ of taking charge of the deck the captain ordered the mainmast to be lowered. When everything was made snug & the boom secured we waited for the wind. Soon we heard it roaring over the water & we could see the white gleam of foam on the water as it approached us in the darkness. ~~The~~ It set in again as suddenly as it had ceased coming first from the N. & then gradually working round to its old quarter E. S. E. and the squalls and wind continued till morning. Soon after four o'clock there was a water spout close to the ship but although I was sleeping on deck close to the wheel the captain did not wake me. At that time I had never seen a water spout but have seen plenty since. However at nine o'clock this morning I saw another very curious natural phenomenon, first cousin to a water spout, in the shape of a whirlwind. The man at the wheel noticed it first. It was then dead to windward & approaching us fast. Mainmast & mizzen were quickly lowered lest it should strike us, but it passed about a hundred yards astern. It had a most extraordinary appearance. The water for a space of from twenty to thirty feet in diameter was rotating rapidly & the spray was rising from it and twirling in the air in a gradually enlarging circle like the steam of a boiling pot, at the same time it was advancing rapidly. I asked one of our Tongan men what they called it. He told me that in the Lau dialect of Fiji (which is closely allied to the Tongan) it was called Gasua sua. and in the Bau dialect Corulaca. The etymology of the latter word points to its destructive effect upon the sails of a ship but about that of the former I am in doubt. In

a Samoan dictionary that there is on board the word for whirlwind is "asiasio" and the figurative meaning is "the heat felt by one in a fever".

At noon we had made 35 miles NE by E $\frac{1}{4}$ E and we are in longitude 178.25 E

I omitted to mention that last night a booby settled on the foremast but finding the foothold insecure settled upon the gaff and from there moved to the cross trees. However as we were rolling heavily it soon left us and doubtless passed as uncomfortable a night as we did.

This afternoon two small whales followed us for some time. They were about twenty feet long of a white colour and the dorsal fin was very prominent. The nose appeared ~~to~~ blunt like that of the sperm whale, as they rose from time to time to blow.

If we go on at this rate seeing phenomena natural & unnatural I shall feel deeply disappointed if I get back to Fiji without meeting with the sea serpent himself.

About four o'clock a very heavy squall came on lasting about half an hour during which we stowed the mainsail & jib altogether, when the squall had passed we reefed the jib & mizzen & double reefed the mainsail and as the wind continued to blow hard all night it was as much as we could carry. Once or twice she went bows under and I expected the water casks to break & drift & pay a visit aft.

Altogether it was a very wet uncomfortable night.

Later day 14th June The wind moderated a little this morning after daylight and we took a reef out of the mainsail. At eight o'clock we ~~had~~ ^{had} a peep at the sun & got a sight. The only signs &

Wonders seen this morning are a very large school of Bonitos chased by two sharks and a square gin bottle floating in the water. I regard the latter as a certain sign that we are approaching Fiji. Position at noon $10.18 S$ $179.11 E$. We have made a NE by E course. During the afternoon & evening the weather became finer.

We are not now very far from the island of Sophia. It is said to be visible sixteen miles as it is not quite so low as the other islands of the Ulice group but we do not expect to sight it. Sunday June 15th The wind this morning is now from the S & we are laying E by N. At noon our position is approximately $9.40 S$ $179.35 W$, as we have now crossed the 180^{th} meridian & are consequently in west longitude.

This afternoon it is again squally with a high sea running. Towards evening the squalls increased and we double reefed the mainsail & reefed mizzen & jib.

Monday 16th June About two o'clock in the morning during a severe squall with thunder & lightning the wheel chain parted. We lowered the mainsail & jib while the damage was repaired in a temporary manner & towards daylight the weather moderated. At six as the wind had

drifted a little more to the eastward we went about again but could lay no higher than S by E by the compass. Taking into account lee way & variation we are probably not making better than S.W. true. During the morning as the weather moderated we shook out all reefs and at noon we were in $9.35 S$ $178.51 W$. The weather again became squally towards evening but the wind got round to the NE so that we were able to ease off the sheets a little, but as we were plunging bows under at each wave we put a reef in the mainsail & mizzen making the ship

go much easier

Tuesday 17th June A fine morning with less sea. The wind is still strong from the NE and we are making good progress S.E. At noon we have made 90 miles S by E. and our position is 11.4 S. 178.34 W.

I saw a pearly nautilus (*Nautilus pompilius*) floating along side this afternoon & tried to catch it in a bucket as it passed, but it sank at our approach.

Wednesday 18th June Between twelve & two this morning the sea was very high & we rolled tremendously taking plenty of water on deck. We were somewhere in the neighbourhood of the Adolphus Bank. The least water shown upon it in the chart is sixteen fathoms ~~but~~ doubtless this would account for the heavy seas we met with. After daylight we had a strong breeze from the eastward & we made good progress. Shortly before noon we carried away the bobstay but quickly repaired the damage & our run was 102 miles. Position 12.38 S 177.59 W. In the afternoon the sheets were eased off a little as we are now well to the eastward.

Thursday 19th June At 1/2 past ten this morning we sighted the island of Alofa (1200 ft high) bearing S.W. about 25 miles. This makes us rather more to the eastward than we supposed. It is the first land we have seen since leaving Apamama on the 24th of last month. At noon Totoman too was visible. The latter island is 2500 ft high & consequently visible a long distance. We are now eating our last tin of biscuits. At noon we had done 105 miles & our position was 14.20 S 177.46 W. We immediately eased off the sheets & let her run before the wind ~~steering for the~~ Course S by W $\frac{3}{4}$ W. steering for the Mamuka Passage into the 4' isle group. After dinner we set the

square sail and as the breeze keeps fresh & the water is fairly smooth we are going (for the Patience) at a good pace, although the weed & barnacles on our bottom impede us considerably. I find that not only are we at our last tin of biscuits but our last cask of salt horse is nearly finished so that we have narrowly escaped having to fall back upon the copra for food. At sunset Alofa was still in sight bearing N.W. by W. distant about 16 miles. The breeze is freshening so that we ought to make a good run through the night.

~~4 June~~ Friday 20th June. We have been going well through the night but this morning the wind has changed to the S.E. consequently we are again close hauled. The weather is dull with rain squalls. Towards noon the wind increased from the S.S.E. & we reefed mainsail & mizzen. Yesterday's exhilaration has given way to a feeling of despondency at the thought of a possible further prolongation of the voyage. At noon we were in 15.35 S. 178.26 W. having made 85 miles. The weather is now very bad & it is raining in torrents. Towards evening the wind drew more to the eastward, ~~the~~ the rain ceased & my spirits again rose with the barometer at the thought of seeing land at daylight.

Saturday 21st June We have had a good breeze all night & have been steering south. I was on the look out for land at daybreak but nothing was in sight. The sun rose at half past six and about seven we sighted some high land to the S.W. but as we were uncertain as to the correctness of our yesterday's sights we did not know whether it was Taviani or Yanna Balavu. Up to nine o'clock we had not made out or position

but there was a very heavy break visible from
 the mast head ~~back~~ away to leeward which we
 supposed to be the Look-out Reef. By half past
 nine we were certain that the land we saw
 was Vanua Balavu. Soon Island appeared right
 ahead & Munia was visible in the distance nearly
 directly behind it, while Cikombia was in sight
 on the port bow. By 9.45 Naitamba was in
 sight bearing nearly due west. Being now quite
 certain of our position we bore up & set the
 square sail & ran before the wind. Shortly
 before twelve o'clock we passed the three small
 islands of Kikomboubo on the starboard beam
 & at the same time Kamacez opened out from
 the N. end of Vanua Balavu. There is a
 fine breeze, a bright sun and the sight of land
 with trees upon it other than coconuts is a
 great relief after the tedious voyage. The "Patience"
 too as though she smelt the land appears to be
 doing her very best and all on board are in high
 spirits. At noon we sighted Malima right ahead
 and at a quarter past Manzo came clear of the
 end of Vanua Balavu. At half past Yathat₂
 was visible on the port bow almost in our course
 & soon afterwards we sighted Vatu Vara &
 steered to pass north of it. At five we passed near
 to Yathat₂ & the small low island of Kiambu
 near it, and at six we were off Vatu Vara.
 This island is from its peculiar shape frequently
 known as Hat Island. The lower part of it has
 a terraced appearance forming the brim & the
 central part rises to a height of 1,000 ft. making
 it a good mark for ships.

Sunday 22nd June. We came along all through the night with the wind right aft & the square sail set. At five the moon rose & shortly afterwards the dawn began to break. The beauty of that sunrise I shall never forget. The horse-shoe reef was breaking in a long line of white foam on our starboard hand and on the same side the islands of Koro, Mokoai & Wakaia appeared as the pale green of the moon lit sky faded into the rosy tint of dawn. On the port hand were the islands of Nairai Gau and Batici while right ahead ^{appeared} the high-land of Ovalau the end of our voyage. By half past ten we were in the Seruka passage and at eleven we cast anchor off the town. ~~2~~

I had been ready to go ashore at once but in a not very reputable condition for I ~~had no shoes~~ ^{landed barefooted} to my feet as I had worn out all my stock of boots on the reefs in the Gilbert Islands. However as most of the good people of Seruka were in church & the rest asleep I met no one but making my way to the hotel I borrowed a pair from the proprietor and appeared in a more or less presentable condition at dinner where I enjoyed my first square meal for three months & a half.

I remained in Seruka till Tuesday 24th June & then left for Suva in the steamer at midnight arriving early the following morning at my destination.

I will not deny that I was glad the voyage had come to an end, but notwithstanding I felt some regret at taking leave of the captain & crew that had been my companions for so many months, from all of whom white men and natives I had met with the greatest courtesy & kindness. None of them have I ever met since.

I left Seruka for Suva before the cargo was discharged

so that I never had an opportunity of finding out whether the sword-fish's sword penetrated right through the ship's side or not.

Poor old Patience. I entertain a kindly feeling for her too. I never saw her again and her old bones lie somewhere deep down among the coral outside the reef at Seruka. She was at anchor at Seruka during the great hurricane in March 1886. She dragged her anchor and was driven out to sea over the reef & no trace of vessel or crew were ever seen again. Another cutter went over the reef at the same time and the escape of ^{one} only man on board ~~appeared to me~~ ^{was} so extraordinary that I quote here the account as it appeared in the "Fiji Times".

"Yesterday afternoon definite news of the fate of the
 "Ketch Patience and the cutter Korotubee was received
 "from James Bowne, master of the latter, who arrived
 "in the Maria from Makayai. The tale of extraordinary
 "exposure, endurance, and escape which he tells can
 "best be given in his own language. He says:-
 "At nine on Thursday morning, I dragged from my
 "anchorage at Nakorokoro, but got hold again.
 "I was behind the Patience, at half past nine
 "she broke away and came down on me broadside
 "and carried me away. Jones (Master of the Patience)
 "said "This is a case for you and me". I said, "Hoist
 "your stayrail & get clear, and I will hoist mine". He
 "did and got clear. I ran for Nas-ova and could have
 "headed her. But I thought it was a pity to go in &
 "smash up, so I thought I would try & save her and I
 "went right down the coast. The Patience tried to
 "follow but she went right out of the passage, the
 "Seruka passage, the south passage, and struck on
 "the lee side & that was the last I saw of her.

" I hoisted my jib as the Maygail had been blown
 " away but it was no sooner up than it too was blown
 " away. So we drifted and drifted till the wind came
 " round to the west, and swept us on to the reef near
 " Sawaki near Voma. In trying to keep her off the
 " tiller broke short off. I got two axes and drove
 " them into the rudder head, but just then a heavy sea
 " from the reef broke over the vessel & knocked me and
 " a Tonga man, named Tauli, into the sea. I swung
 " out to the other two boys to stick to the vessel but
 " they got frightened and jumped over. They had an oar.
 " he had nothing. I saw the cutter knocked off the
 " reef & go down in deep water. We swam with the
 " current and once were within a hundred yards of the
 " shore off Cape Horn. Then the current swept us out and
 " we swam on and swam on. In the evening just before
 " sunset I think, I saw a kind of light colour before me.
 " I could not see the sun the drift was so thick but I
 " knew it was breakers. I told Tauli: "Look out there's
 " a reef, let the swell carry you on top, if you get under
 " you will be done for." I was carried on to the reef by
 " the swell, but I never saw Tauli again, though I
 " called for him a good while. He got knocked over
 " at about ten o'clock, and I think it was about six
 " when I made the reef. I took a good rest and
 " then swam off again and a shark swam against
 " me & hit me. I turned round and saw the shark
 " and kicked him, and he went right away and I
 " didn't see him again. I swam on and swam
 " on till about 4 o'clock, I think and then I saw
 " the dark boom of land. There were heavy breakers on
 " it but I said "Die or live I must chance it" and
 " I let the swell take me. It washed me up into a
 " fine place. I scrambled a bit further up and